Cairo University

The Best Thesis Awards

Academic Years 2011 – 2012

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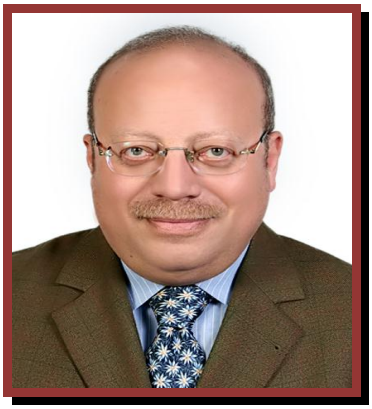

Best Theses Awards

The strategy of the university aims to enhance its capabilities and potentialities through developing its human and financial resources, as well as to improve the academic abilities of its staff members and their assistants, in order to prepare them for the age of science and technological revolution. In this respect, the university has adopted unconventional methods to develop the system of academic research in order to meet the needs of society and research and to encourage its scholars and researchers. Among these means of encouragement are:

- Allocating an award for the best thesis (MSc – PhD) in each faculty or institute.

- Allocating an award for academic publishing in international periodicals, according to certain criteria.

- Financing academic proposals in different academic specializations within the framework of international research conferences held annually by the university.

This publication comprises the best theses (MScs – PhDs) for the academic year 2010-2011. The university will continue to periodically support its distinguished researchers, on both financial and moral levels.

Prof. Gamal Essmat

Vice - President for Post-graduate Studies and Research
Cairo University

Prof. Hossam Kamel

President
Cairo University

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Statistics

Faculty in Year 2011	Ph.D.	M.Sc.
Medical Sciences Sector	**10**	**9**
Medicine	**3**	**3**
Pharmacy	**1**	**1**
Oral and Dental Medicine	**3**	**2**
Nursing	**2**	**1**
National Cancer Institute	**1**	**1**
Physical Therapy	**1**	**1**
Engineering Sciences Sector	**4**	**5**
Engineering	**2**	**3**
Computer and Information	**1**	**1**
Urban Planning	**1**	**1**
Basic Sciences Sector	**6**	**6**
Science	**2**	**2**
Agriculture	**2**	**2**
Veterinary Medicine	**2**	**2**
Inter and Multi Disciplinary &Future Sciences Sector	**4**	**4**
National Laser Institute	**1**	**1**
African Studies Institute	**2**	**2**
Institute of Statistical Studies and Research	**1**	**1**
Social Sciences Sector	**6**	**5**
Law	**3**	**2**
Commerce	**1**	**1**
Mass Communication	**1**	**1**
Economics And Political Sciences	**1**	**1**

Faculty in Year 2011	Ph.D.	M.Sc.
Humanity Educational Sector	**8**	**7**
Arts	**2**	**2**
Archaeology	**2**	**1**
Dar El-Ulum	**1**	**1**
Kindergarten Education	**1**	**1**
Specific Education	**1**	**1**
Institute of Educational Studies	**1**	**1**
Total	**38**	**36**

	2006-2007		2007-2008		2009-2010		2010-2011	
Faculty	**M.Sc.**	**Ph.D.**	**M.Sc.**	**Ph.D.**	**M.Sc.**	**Ph.D.**	**M.Sc.**	**Ph.D.**
Medical Sciences Sector	**5**	**7**	**10**	**12**	**9**	**10**	**9**	**10**
Engineering Sciences Sector	**4**	**3**	**4**	**2**	**4**	**4**	**5**	**4**
Basic Sciences Sector	**4**	**4**	**6**	**7**	**4**	**6**	**6**	**6**
Inter and Multi Disciplinary &Future Sciences Sector	**3**	**2**	**4**	**1**	**3**	**2**	**4**	**4**
Social Sciences Sector	**3**	**4**	**2**	**4**	**5**	**6**	**5**	**6**
Humanity Educational Sector	**7**	**8**	**7**	**9**	**6**	**7**	**7**	**8**
Total	**26**	**28**	**33**	**35**	**31**	**35**	**36**	**38**

Medical Sciences Sector

- **Medicine**
- **Pharmacy**
- **Oral and Dental Medicine**
- **Nursing**
- **National Cancer Institute**
- **Physical Therapy**

***Name* :** **Doaa Mohamed Abdel-Aziz**

***Faculty* :** **Medicine**

***Dept.* :** Pediatrics

***Degree* :** Ph.D.

Title of Thesis: Hospital Acquired Infections in Post-operative Pediatric Cardiac Surgical ICU

Supervisors : Dr. Zienab Salah Seliem, Dr. Amany Ali El-Kholy, Dr. Hala Mounir Agha and Dr. Amira Esmat El-tantawy

Abstract :

Healthcare-associated infections **(HAIs)** are infections that patients acquire during the course of receiving treatment for other conditions within a healthcare setting **(CDC., 2010).**Health care-acquired infections (HAIs) have been associated with significant morbidity and attributable mortality, as well as greatly increased health care costs **(Higuera F. et al., 2007).**

Regarding **DAIs** rates in our study, the **DAIs** rates are higher than the Bench marking determined by the International Nosocomial Infection Control Consortium using standardized definitions **(Rosenthal et al., 2008, Summary of INICC report data 2002-2007). DAIs ,** are a huge and largely unrecognized threat to patient safety in the developing world, a far greater threat than in the developed countries**(Rosenthal et al., 2008).** Regarding the **process surveillance**, the overall rate of **(HH) hand hygiene** compliance rate was lower in this study than in the overall INICC PICUs(Rosenthal et al., 2008).

Keywords:

Health care-associated infections (HAIs); Morbidity; Mortality; Device associated Infections (DAIs); Developing World; Process Surviellance; Hand Hygiene.

***Name* :** **Doaa Mostafa Gharib Mohammed**

***Faculty* :** **Medicine**

***Dept.* :** Medical Biochemistry

***Degree* :** Ph.D.

Title of Thesis: Endothelial Progenitor Cells and Development of Collatera Formation in Patients with Chronic Total Coronary Artery Occlusion

Supervisors : Dr. Emad Ali Abd Elnaby, Dr. Magdy Abd El-Hamid, Dr. Dina Sabry Abd El-Fatah and Dr. Sherif Elrefaay

Abstract :

The aim of the present work was to study whether or not the number and function of endothelial progenitor cells (EPCs) were associated with the development of collateral formation in patients with single-vessel coronary artery disease of chronic total occlusion (CTO). We aimed also to examine the ability of EPCs to form new blood vessels and to differentiate into cardiomyoctes in an experimental model (canines) with acute myocardial infarctions (AMI).

Patients with good collaterals (n=10 Rentrop class 2 and 3) exhibited an increased number of CFUs and significant high expression of hVEGFR-2 and eNOS genes in the culture cells, compared with patients with poor collaterals (n=10, Rentrop class 0 and 1). For the experimental animals, ECG and Cardiac enzymes measurements showed increased cardiac activity in dogs treated with EPCs, while histopathology showed increased neovascularization and immunohistochemistry showed presence of hEPCs newly differentiated into cardiomyocyte-like cells in peri-infarct cardiac tissue.

Keywords:

Human EPCs; CTO; Collaterals formation; Neovascularization; Canine; Acute myocardial infarction.

***Name* :** **Nivin Mahmoud Mostafa Sharawy**

***Faculty* :** **Medicine**

***Dept.* :** Physiology

***Degree* :** Ph.D.

Title of Thesis: Study of the Effect of Female Sex Hormones on Hypothalamo –Pituitary Adrenal Axis Response to Local and Systemic Inflammatory States

Supervisors : Dr. Mohamed Hassan Ali, Dr. Moshira Rateb, Dr. Laila Rashed and Dr. Wael Shawky

Abstract :

Endotoxin is a potent activators of the hypothalamic – pituitary – adrenal (HPA) axis. However, sex hormones can modulate HPA response to local and systemic inflammation. We used female rats divided in to 3 main groups: group I, sham group, group II cecal ligation and puncture (CLP) and group III local inflamed. Each of group II & III further subdivided into female rats with intact ovary, ovariectomized female rats with either received estradiol, progesterone or vehicle. Our study in the rate showed that the HPA response to CLP and local inflammation were enhanced by gonadectomy and attenuated by either estradiol or progesterone and that inflammatory cytokine and NO affect by levels of sex hormones.

Keywords:

HPA; Sex hormones; CLP; Cytokines.

***Name* :** **Tarek Abdel-Azim R. O. R. Youssef**

***Faculty* :** **Medicine**

***Dept.* :** Clinical and Chemical Pathology

***Degree* :** M.Sc.

Title of Thesis: Evaluation of the Role of Microsomal Epoxide Hydrolase Gene Polymorphism and Paraoxonase Activity in the Pathogenesis of Chronic Obstructive Pulmonary Disease

Supervisors : Dr. Omnia Ahmed Youssef and Dr. Mona Mohamed Fathy

Abstract :

Antioxidants are important for the protection from oxidative stress, in our study 25 patients with COPD, 25 smokers and 10 nonsmokers were included, we found that the homozygous mutation was only present in COPD patients and the mutant heterozygous mutation was found in COPD and smokers, PON1 activity was higher in nonsmokers than smokers and COPD patients respectively, So we conclude that smoking lead to decrease antioxidants activity and cause gene polymorphisms that lead to COPD.

Keywords:

COPD; Mephx; PON1.

***Name* :** **Alshymaa Gamal Aboulkhair Attia**

***Faculty* :** **Medicine**

***Dept.* :** Histology

***Degree* :** M.Sc.

Title of Thesis: The Effect of in Vivo Mobilization of Bone Marrow Stem Cells on The Pancreas of Diabetic Albino Rats (Ahistological & Immunohistochemical Sway)

Supervisors : Dr. Zeinab M. Kamel lsmail, Dr. Ashraf M. Fawzy Kamel and Dr. Mira Farouk Y. Yacoub

Abstract :

The present study demonstrated that, daily administration of StemEnhance induced mobilization of bone marrow CD34+ve hematopoietic stem cells (HSCs) into the peripheral circulation in STZ-induced diabetic rats. Additionally, these mobilized HSCs migrated to the diabetic pancreatic islets. Four weeks after oral Stem Enhance administration, there was an increase in the area percent of insulin immunepositive cells. Blood glucose level showed a decline in Stem Enhance treated diabetic rats as compared to the diabetic untreated rats but was still higher than that of control. This provides to some extent similar results to transplantation of stem cells, directly or after their in vitro culture and their differentiation into pancreatic islet B cells. This procedure avoided the risks and complications associated with stem cell transplantation. It also avoided the need for advanced laboratory facilities.

Keywords:

Diabetes; Stem cells; CD34; StemEnhance! Streptozotocin; Pancreas.

***Name* :** **Emmanuel Fares Aziz Fawzy**

***Faculty* :** **Medicine**

***Dept.* :** Cardiovascular Medicine

***Degree* :** M.Sc.

Title of Thesis: Impact of Diabetes Mellitus on Coronary and Extracoronary Calcification in Patients with Coronary Artery Disease

Supervisors : Dr. Sameh W. G. Bakhoum, Dr. Azza A. Farrag and Dr. Mohammed Ali Salem

Abstract :

Cardiovascular complications are the major cause of diabetes-associated morbidity and mortality. However, not all patients with diabetes are at increased risk for cardiovascular disease (CVD). Coronary artery calcification was found to be a powerful predictor of coronary artery disease (CAD). The presence of extracoronary cardiac calcification as a useful predictor of CAD is not yet established, especially in type 2 diabetes mellitus (T2DM). The aimof this study was to evaluate the relation between extracoronary calcification and extent of CAD in a group of T2DM patients who were scheduled for computed tomographic coronary angiography (CTCA). We prospectively studied 380 patients (151 had T2DM) under the age of 60 years who were scheduled for CTCA because of suspected CAD. Severity of CAD was assessed byGensini score. Coronary artery calcium score (CACS) as well as calcium score in the aortic valve، mitral annulus, ascending aorta, and descending aorta were measured by a 256-row multidetector computed tomography scanner with dedicated software for calcium calculation. Patients with known CAD were excluded. Diabetic and nondiabetic patients had comparable age and gender distribution. However, the diabetic group had higher Gensini score, CACS, and extracoronary calcium score (ECCS). Logistic regression analyses identified male gender and ECCS as significant predictors for the presence of CAD in diabetic patients. Age, smoking, and ECCS were the significant predictors of CAD in nondiabetic patients. Type 2 diabetic patients had increased coronary and extracoronary calcification. ECCS was found to be a significant predictor of CAD in diabetic and nondiabetic patients only when CACS was not taken into account.

Keywords:

Extracoronary calcification; Coronary artery disease; Diabetes.

***Name* : Lamiaa Ahmed Ahmed Atia**

***Faculty* : Pharmacy**

***Dept.* :** Pharmacology and Toxicology

***Degree* :** Ph.D.

Title of Thesis: Pharmacological Study of the Possible Cardioprotective Effects of Certain Agents in Ischemia/Reperfusion Injury in Rats

Supervisors : Dr. Azza Mounir Agha, Dr. Omnia Salem Attia and Dr. Hisham Ali Salem

Abstract :

The aim of the present investigation was to study the cardioprotective effects of different non pharmacological and pharmacological preconditioning therapies In ischemia/reperfusion (I/R)-induced hemodynamic, biochemical and histological changes in rats. Two main sets of experiments were performed. The first set was carried out to determine the cardioprotective effects of different cycles or doses of various preconditioning therapies in myocardial I/R (40min/l Omin). These therapies were local or remote preconditioning with 1, 2, 3 and 4 cycles, oxidative preconditioning with two doses of ozone therapy and pharmacological preconditioning with nicorandil (3 or 6 mg/kg) and pioglitazone (10 or 20 mg/kg). Heart rate and ventricular arrhythmias were continuously recorded during the whole operation. At the end of reperfusion, plasma creatine kinase-MB (CK-MB) activity and total nitrate/nitrite (NOx) were determined. In addition, lactate, adenine nucleotides, thiobarbituric acid reactive substances (TBARS), reduced glutathione (GSH) and myeloperoxidase (MPO) activity were estimated in the heart left ventricle. The effective cycle or dose in each type of preconditioning therapy was assessed based on its protective effects on measured parameters and hence was selected to complete the second set of study. In the second set of study, descending aortic blood flow was continuously recorded during the whole operation. Moreover, plasma tumour necrosis factor-alpha (TNF-a) and vascular endothelial growth factor (VEGF), cytosolic calcium and myocardial caspase-3 activity were estimated. Histological examination was also performed to visualize the protective cellular effects of different pretreatments. In the first set of study, local preconditioning provided more effective cardioprotection than remote preconditioning in ameliorating the overall electrophysiological and biochemical changes associated with I/R injury. Lower doses of nicorandil and pioglitazone provided more cardioprotection than higher doses against ventricular arrhythmias and biochemical changes induced by I/R. The higher dose of ozone therapy provided also more prominent cardioprotectlon against the biochemical changes

associated with I/R injury. Finally, it could be concluded that local preconditioning with 3 cycles and pharmacological preconditioning with nicorandil (3 mg/kg) were more effective than other types of preconditioning therapies in ameliorating the overall electrophysiological, biochemical and histological changes associated with myocardial I/R.

Keywords:

Ischemia/reperfusion; Nicorandil; Ozone; Pioglitazone; Preconditioning.

***Name* :** **Amr Sayed Motawi Sonousi**

***Faculty* :** **Pharmacy**

***Dept.* :** Organic Chemistry

***Degree* :** M.Sc.

Title of Thesis: Design and Synthesis of Certain Quinazolinone Derivatives of Expected Anti-Asthmatic Activity

Supervisors : Dr. Afaf K. El-Ansary, Dr. Hanan Hasan Kadry and Dr. Eman Mohamed Ahmed

Abstract :

This study comprises a brief literature survey on asthma and its treatment as well as the biological activities and chemistry of quinazolinone derivatives.In addition, the thesis involves the design of some new 3-butylquinazoline-2,4-dione derivatives to give novel target compounds aiming to possess an antiasthmatic activity through PDE4 inhibition. The structural elucidation of the new synthesized compounds was supported by elemental analysis, IR, 1HNMR as well as mass spectral data. Besides this, synthesized compounds were subjected to docking studies on the active site of phosphodiesterase enzyme type 4 (PDB ID: 1RO6) using MOE software. The activities of recombinant human PDE4B2 using an in vitro enzymatic assay of twenty representative compounds were performed by BPS Bioscience Inc. USA. Some of test compounds showed a potent enzymatic inhibition.

Keywords:

Quinazolones; Asthma; Phosphodiesterase inhibition; Docking.

***Name* :** **Fady Hussein El-Sayed Fahim**

***Faculty* :** **Oral and Dental Medicine**

***Dept.* :** Orthodontics

***Degree* :** Ph.D.

Title of Thesis: Reduction of Alveolar Clefts by Distraction Osteogenesis in Unilateral Cleft Patients

Supervisors : Dr. Wagih Abd El-Kader and Dr. Dalia El-Boghdady

Abstract :

Introduction: Although secondary alveolar grafting is a successful procedure for managing alveolar clefts, but graft success might be compromised in cases of wide alveolar clefts, insufficient soft tissue for tight closure on the graft, repeated failures of the grafting procedure and delayed alveolar grafting. Interdental distraction using bone-and tooth-borne distraction devices had their drawbacks and failed to give 3D control on the transport segment. **Purpose:** Approximating alveolar clefts by inter-dental distraction using Archwire- Borne distraction device with 3D control of the transport segment. **Materials and Methods:** 10 patients, 7 females and 3 males that had unilateral alveolar clefts were selected. The age range at the time of inter-dental distraction was 12-22 years with a mean of 16.9 ± 2.8 years. Vertical interdental and horizontal complete osteotomies was performed to incorporate the maxillary canine and the first premolar in the transport segment. Cone-beam CT was performed just before and immediately after Inter-dental distraction. A new reference system was designed for 3D analysis after automatic superimposition of the two CBCTs. Intra-operator reliability was performed to measure the error in digitization of all dental and skeletal points used in this study. Linear and angular measurements were performed on 3D-CBCT for the maxillary canine and first premolar teeth in the transport segment in the antero-posterior and mediolateral dimension. Also, the volume of the alveolar cleft pre- and post-distraction was measured in cubic mms and compared to each other by paired-t-test. **Results:** High Intra-operator reliability was found. The permanent maxillary canine was transported in a bodily movement forward, while the maxillary first premolar experienced slight tipping. The alveolar cleft volumes were significantly decreased post-distraction at P = 0.006. **Conclusion:** The Archwire – Borne Distractor used in this study was efficient in the approximation of wide unilateral alveolar clefts.

Keywords:

Distraction Osteogenesis; Alveolar cleft; Cleft lip/ palate; Alveolar grafting; Cone-Beam CT.

***Name* : Dalia Ahmed Saba**

***Faculty* : Oral and Dental Medicine**

***Dept.* :** Dental Matrial

***Degree* :** Ph.D.

Title of Thesis: Evaluation of Experimentally Prepared Dental Alginate Impression Material

Supervisors : Dr. Sayed Hussein Sayed Saniour, Dr. Mohamed Ahmed Abd El-Ghaffar and Dr. Iman Ismail Fath El-Bab

Abstract :

The present study investigated trials to prepare an experimental dental alginate impression material, to evaluate and modify its properties regarding the ANSI/ADA specification no.18 for alginate impression material. For this purpose, three commercially available dental alginate impression materials were chemically analyzed to determine their relative chemical compositions. The first experimentally prepared alginate impression material "Alg I" was prepared using exactly the same chemicals and having the nearest chemical composition to the analyzed commercial ones. Specimens of both the commercial and the experimentally prepared alginates were tested and compared according to the ANSI/ADA specification no.18 regarding: the initial setting time, working time, detail reproduction and compatibility with dental stone, recovery from deformation, strain in compression and compressive strength. Further tests were conducted: tear strength and dimensional (mass and linear) stability. Results of the evaluation revealed that Alg I did not meet the ANSI/ADA requirement regarding the "recovery from deformation". Therefore, various compositional modifications were tried by increasing the concentration of the sodium alginate from 12% to 16% and by using different commercially available calcium sulphate dihydrate of high purity. The mixture that was found to fulfill the ANSI/ADA requirement was assigned the "Alg Final Product (Alg FP)" and was then evaluated. The final stage was to investigate the feasibility of utilizing the locally prepared silica fume byproduct from Egyptian ferrosilicon industries, from the Egyptian Ferroalloys Company (EFA CO.) located in Edfu city, Aswan-Egypt in improving the mechanical properties of the experimentally prepared "Alg FP". The results revealed that the addition of the silica fume by-product to the experimentally prepared alginate mixtures did improve its mechanical properties regarding; the recovery from deformation, strain in compression, compressive and tear strengths and that it is quite possible to prepare dental alginate impression material satisfying the requirements of the ANSI/ADA specification no.18, using the chemicals available in the Egyptian market.

Keywords:

Alginate impression material; Silica fumes; Setting and working time; Detail reproduction and compatibility with dental stone; Recovery from deformation; Strain in compression; Compressive strength; Tear strength and dimensional stability.

***Name* :** **Heba Helal Mounir A. El-Sherbieny**

***Faculty* :** **Oral and Dental Medicine**

***Dept.* :** Operative Dentistry

***Degree* :** M.Sc.

Title of Thesis: Dentin Bond Durability of Fluoride Containing Self-Etch Adhesive Under Simulated Intra-Pulpal Pressure

Supervisors : Dr. Enas Hussein Mobarakand and Dr. Heba Ahmed Abdel Wanis El-Deeb

Abstract :

Objective: To evaluate the dentin bond strength durability of adhesives containing modified-monomer with/without- fluoride after aging in artificial saliva and under intrapulpal pressure simulation (IPPS). Materials and Methods: Occlusal enamel of thirty-six freshly-extracted teeth was trimmed to expose mid coronal dentin. Roots were sectioned to expose pulp-chamber to connect the specimens to the pulpal-pressure assembly. Specimens were distributed over three groups (n=12) according to adhesive system used. The adhesive systems were: a two-step etch-and-rinse adhesive system (SB-Adper TM Single Bond 2, 3MESPE) and two single-step self-etch adhesives with the same modified monomer (bis-acrylamide); one containing fluoride (AOF, AdheSE One F, Ivoclar- Vivadent) and the other not (AO, AdheSE One F, Ivoclar-Vivadent). Bonding was done while the specimens were subjected to 15mmHg IPPS. Resin composite (Valux Plus, 3M ESPE, USA) buildups were made. After curing, specimens were aged in artificial saliva and under 20mmHg IPPS at 37oC in a specially constructed incubator either for 24h or 6 months prior to testing. Thereafter, bonded specimens (n=6/group) were sectioned into beams (n=24/group) with a cross-section of 0.9+1-0.1 mm2 and subjected to microtensile bond strength (μTBS) testing using a universal testing machine. Data were statistically analyzed using Kruskal- Wallis and Mann- Whitney tests (P>0.05). Failure modes were determined using a stereomicroscope at x40 magnification.

Results: At 24h, SB showed -statistically higher μTBS (P<0.05) than the other two adhesives which were not statistically different (P>0.05). The μTBS of SB fell significantly (P<0.05) after 6-month aging in artificial saliva and under IPP. For AO and AOF, the bond values at 6-month were not statistically different from the values measured at 24-h (P>0.05). Modes of failure were mainly adhesive and mixed. Conclusions: Etch-and-rinse adhesives are more sensitive to IPPS than self-etch adhesives. Adhesives modification with hydrolytically stable monomers could be a valuable approach to enhance dentin bond durability.

Keywords:

Adhesion; Dentin; Dentin bonding agents; Fluoride and pulpal pressure.

Name **:** **Maged M. El Sayed Abd El Aal**

Faculty **:** **Oral and Dental Medicine**

Dept. **:** Removable Prosthodontics

Degree **:** M.Sc.

Title of Thesis: Comp Ara Tive Evaluation of Different Oral Appliances on the Treatment of Obstructive Sleep Apnea

Supervisors : Dr. Essam Adel Aziz and Dr. Iman Mohamed Abd El-Wahab

Abstract :

Purpose: The aim of this study was to evaluate and compare the effect of changing either the amount of mandibular protrusion or the vertical jaw separation on apnea/hypopnea index (AHI) and snoring index (SI) In patients suffering from obstructive sleep apnea (OSA). Material and methods: Twenty fully dentulous patients suffering from obstructive sleep apnea were randomly divided into two equal groups; group I: In which patients were treated by screw-type adjustable two-piece mandibular advancement devices (MADs) that were initially adjusted at 50% (1st stage), then readjusted at 75% (2nd stage) of the maximum protrusion, and group II: in which patients were treated by two ready-made bite openers (BOs); the first provides 7 mm (1 st stage), while the second 11mm (2nd stage) vertical jaw separation. Polysomnography (PSG) was used to evaluate AHI and SI and to compare between both groups and between the stages within each group. Data were collected to calculate the mean values for all stages and the mean differences between both stages in each group. Statistical analysis was performed using two-way ANOV A test to detect significant differences between both groups. On the other hand, Pearson's correlation test was used to compare between the stages within each group. Results: Regarding the AHI mean differences the comparison - among different stages of group I and II revealed a statistically significant difference among all stages except stage I of group I and stage II of group II, while regarding SI, mean differences, no statistically significant difference was found amop.g them except stage n of group I and stage I of group n. Within each group, a statistically significant difference was found between the base line and both stages regarding AHI and SI. On the other hand, the, comparison between the stages revealed a statistically significant djfferel1ce regarding the SI mean differences only. Conclusion: MADs are capable of achieving better results than BOs regarding AHI, while both appliances can achieve comparably equal results regarding SI. Clinical implication: For patients complaining of OSA, it is -recommended to use MADs adjusted at 50% advancement rather than 75% to minimize the possible side effects and the

possible extra annoyance that may happen. On the other hand, for snorers, it is advisable to use BOs rather than MADs as they are simpler, more tolerable and cheaper.

Keywords:

Mandibular advancement devices (MADs); Bite openers (BOs); Polysomnography (PSG); Apnea\hypopnea index (AID); Snoring index (SI); Obstructive sleep apnea (OSA).

Name	**:**	**Atef Jaber Ismail**
Faculty	**:**	**Nursing**
Dept.	**:**	Critical Care & Emergency Nursing
Degree	**:**	Ph.D.
Title of Thesis:		Effect of Training Counsellng Program on Psychological Stress Among Amputees in Gaza Governorates, Palestine During Gaza WAR
Supervisors :		Dr. Warda Youssef Mohamed and Dr. Nefissa Abd El-Kader

Abstract :

Wounded amputees are faced with myriad issues involving mutilation, pain, multiple surgeries, body image issues, and a long period of rehabilitation. The care of the patient with an amputation carries its own unique set of psychosocial issues. Body image is altered, as well as previous function. Depression, anxiety, and post traumatic stress disorder symptoms are common and must be addressed rapidly with ongoing counseling and pharmacologic management. The aim of the study was to investigate the effect of designed training - counseling program on reducing psychological stress among amputees in Gaza Governorates during Gaza war. Quasi-experimental design (pre-test/post-test) was used in this study; all the accessible population (100 subjects) was included in the assessment phase to assess the level of stress among Gaza war amputees. For applying the counseling-training program, 24 subjects were chosen who have the highest scores on the stress scale. Data were obtained through three main tools; Sociodemographic and historical data, psychological stress scale: to assess the level of stress among amputees and session evaluation form. The training counseling program was designed on Albert Ellis theory for rational emotive behavior therapy. The program was divided into 23 sessions; each session duration was 60 minutes, given in an average of three sessions per week for two months. The main results revealed that designed training counseling program had an effective impact on reducing psychological stress among the amputees in Gaza Governorates during Gaza war.
The psychological stress scale was refilled by the same subjects after 2 months of the program application to assess the level of stress among amputees to examine the stability and reliability of the applied program to ensure continued effectiveness and impact of treatment program used in the study. There was no statistical significant difference at sig. level (0.05) between post and follow-up effect tests, that's mean the effect of training counseling program in reducing the psychological stress among the subjects was stabile in all the stress scopes. The

study concluded that the training counseling program had a positive effect on reducing psychological stress among amputees in Gaza governorates during Gaza war. The study recommended that nurses should see their patient from a holistic perspective and should effectively utilize their roles as educators and counselors to contribute in resolving public health problems like stress among amputees in Gaza Strip, and to conduct further similar study on larger, probability and representative sample of amputees in Gaza strip.

Keywords:

Training counseling program; Wounded amputees; Psychological stress; Gaza war.

Name **:** **Naglaa Mostafa Gaber**

Faculty **:** **Nursing**

Dept. **:** Mental Health Nursing

Degree **:** Ph.D.

Title of Thesis: The Effect of Reminiscence on Self-Esteem, Depression, and Life Satisfaction Among Elderly People

Supervisors : Dr. Zeinab Abdel-Halim Osman, Dr. Enayat Abdel-Wahab Khalil and Dr. Magdy Mohamed Arafa

Abstract :

As people enter old age, they begin to experience associated changes in their physical, mental and social health. Elderly individuals often develop feelings of loneliness, sullenness, depression and loss of self confidence. Reminiscence is a commonly-used clinical intervention to assist the elderly in adapting to the aging process. Therefore, this study was conducted to evaluate the effect of reminiscence on self-esteem, depression, and life satisfaction among elderly people. A pre-post quasi-experimental design was utilized in this study. A sample of convenience of 30 institutionalized older adults was recruited from Dar El-Hana Geriatric home. Socio-demographic/medical data sheet, Mini-Mental State Exam (MMSE) scale, Geriatric Depression Scale (GDS), Self-esteem Scale, University of California Los Anglos Loneliness Scale (UCLA), and Life Satisfaction Scale were used to achieve the purpose of this study. A reminiscence program session was held for 90 minutes for a total of 10 weeks (20 sessions), the program focus on particular stages of life using a semi-structured interview. Findings of this study indicated that, reminiscence intervention significantly raised self-esteem, lessened loneliness and improved life satisfaction among elderly individuals; the reduction in depression levels did not reach statistical significance. To conclude reminiscence intervention is an effective alternative intervention which can help living-alone elderly adapt to the aging process. Further studies about reminiscence on a larger number of elderly from different geographical areas are recommended.

Keywords:

Reminiscence; Self-esteem; Depression; Life satisfaction; Elderly people.

Name **:** **Amel Dawod Kamel**

Faculty **:** **Nursing**

Dept. **:** Maternal and Newborn Health Nursing

Degree **:** M.Sc.

Title of Thesis: Assessment of Common Types of Vaginal Infections Among Women Attending Gynecological Clinics at El-Manial University Hospital: A Proposed Plan of Action

Rating common vaginal infection

Supervisors : Dr. Shadia Abd El-Kader Hassan, Dr. Soumaya Mohamed Hassan and Dr. Nada Nabil Nawar

Abstract :

The aim of this exploratory study was two fold; to assess the common types of vaginal infection among women during childbearing period; and to prepare a plan of action for women suffering from vaginitis (10%) of sample". Four hundred women having abnormal vaginal discharge, and attending Gynecology Clinics at El-manial University Hospital, Cairo University, Egypt were recruited for the study. Data were collected through an interviewing questionnaire schedule, physical and vaginal examination, laboratory investigations, and follow up sheet. The study results indicated that the mean age of the sample was 31.44 ± 6.14 years old, 43% of the sample cannot read and write, 54%were living in urban area, 95% were married, and 82% were house wives, Ninety percent of them had regular menses, the mean interval of menstruation was 27.67 ± 4.16 days, the mean duration of menstruation was 4.94±1.97 days, 77% of the sample were multigravida, while 72% of them were multiparous. Thirty nine point four of them had history of chronic illness. More than one third of them were using cotton underwear, and 39.6% of them were using vaginal douche. The prevalence of vaginal infections among the total sample was 58.8%. Vulvo-vaginal Candidiasis was diagnosed in 156 women (41%), Bacterial Vaginosis was identified in 39 women (10.2%), twenty three women (6%) had Trichomonas Vaginalis, and six women (1.6%) had mixed infection. The results indicated also that subside the women complaint with statistically significant difference, and normal vaginal swabs among 65% with highly statistically significant difference among women who were receiving health education and follow up. The study recommended that accurate diagnoses based on laboratory investigations and health education which helps in reducing the incidence and recurrence of vaginal infection.

Keywords:

Common types of vaginal infection; Prevalence; Impact of health education.

Name	**:**	**Mohamed Lotfy Mohamed Wafa**
Faculty	**:**	**National Cancer Institute**
Dept.	**:**	Surgical Oncology
Degree	**:**	Ph.D.
Title of Thesis:		Thoracoscopic Internal Mammary Lymphadenectomy in Breast Cancer, Technique and Indications
Supervisors :		Dr. Waheed Yousry Gareer, Dr. Ismail Morad and Dr. Tarek Essam

Abstract :

The aim of our study was to investigate the feasibility and safety of thoracoscopic internal mammary lymphadenectomy as a method to refine and thereby improve nodal staging in breast cancer. **Methods:** During the period from June 2004 to May 2007, 50 patients with operable breast cancer underwent modified radical mastectomy (MRM) or breast conserving surgery (BCS), followed by thoracoscopic internal mammary lymphadenectomy, using 3 ports through the skin incision of the MRM or the BCS. Metal clips were used to mark precise site of lymphadenectomy. **Results:** Of total number of 50 patients, the mean age of patients was 44 years (range, 27–60 years). 40 (80%) had medio-central tumor, 10 (20%) had lateral tumor. 35 (70%) had clinically involved axillary nodes. 16 out of 50 patients received neo-adjuvant chemotherapy. 44 patients underwent MRM and 6 patients underwent BCS. No intra-operative complications occurred. Atelectasis was the only postoperative complication that was encountered, which occurred in 12 cases, and was treated conservatively. The average chest drainage period was 1.2 day (range, 1–2 days). The total number of IMN metastasis was 18 patients (36%). The risk of IMN metastasis was higher; in younger patients ($P = 0.03$), in medio-central tumors ($P = 0.03$), in bigger tumors ($P = 0.05$), and with heavier metastasis of axillary LNs ($P = 0.001$). But a correlation with the histological pattern of the 1ry tumor didn't exist ($P = 1$). Knowing the IMN status helped in proper staging of patients, 7 patients showed evident stage migration after adding the IMN analysis to that of primary tumor and axillary LN. During the follow up period (the median, 22 months; range, 7 to 42months),no patient had pleural dissemination or port-site metastasis.

Conclusion: Thoracoscopic IMN lymphadenectomy is a safe procedure, which can be done without serious additional complications or cosmetic compromise. And allow proper nodal staging, which allow proper treatment planning by:

•Selecting those patients (64%) who could safely avoid IMN radiotherapy and its morbidity should the IMN be histopathologically negative.

•Providing not only a solid indication of IMN radiotherapy (36 % of patients) should the IMN be histopathologically positive but also aided in precise guidance

of radiation along metal endoclips which were used to mark the exact site of lymphadenectomy, aiming at minimizing cardiac dose.

•Identifying those patients who could receive more appropriate adjuvant chemotherapy regimens (36% of all study patients) or safely avoid them.

Keywords:

Thoracoscopic; Internal, mammary; Lymphadenectomy; Thoracic; Stage.

***Name* :** **Hussam Mohamed Farid**

***Faculty* :** **National Cancer Institute**

***Dept.* :** Surgical oncology

***Degree* :** M.Sc.

Title of Thesis: Raiofrequency Ablation for Non-Hepatic Neoplasms

Supervisors : Dr. Waheed Yousry Gareer, Dr. Ayman Abdel-Wahab Amin and Dr. Tarek El-Baradie

Abstract :

Introduction : radiofrequency ablation is anew promising modality of therapy, can be used as minimally invasive, image guided, way of local treatment of malignant neoplasms as well as some benign conditions.

Aim of the work: to evaluate, radio frequency ablation in management of malignant neoplasms in various tumor sites regarding RFmechanism of action, instruments, indications, Contraindications, complications, and results Object: Radiofrequency ablation (RFA) is an emerging treatment modality for the destruction of malignant tumors by inserting metal needle probe into a tumor and using an alternating electric...u:rent with a frequency in the "radio" range. In he last decade, reports have surfaced about the application of RFA at various other tumor sites including the.prostate, kidney, breast, spleen, thyroid, and longue It has also been implemented in the treatment or benign conditions like nasal polyps, hypertrophic palatine tonsils, and in obstructive sleep apnea as a tool for volume redaction to control symptoms due to compression or obstruction It has also been implemented in the treatment of atrial fibrillation, Barrett's esophagus and in the palliative treatment of bone metastasis.

Conclusion: radiofrequency ablasion is apromising treatment option needs to be well evaluated in..the management of malignant neoplasms invarious sites.

Keywords:

Radiofrequency ablation; Head and neck; Breast; Lung; kidney; Suprarenal; Bone barrets esophagus.

Name	**:**	**Islam Mahmoud Abdallah Al-Azab**
Faculty	**:**	**Physical Therapy**
Dept.	**:**	Physical Therapy for Neuromuscular Disorders and its Surgery
Degree	**:**	Ph.D.
Title of Thesis:		Electrical Versus Mechanical Vestibular Stimulation on Balance in Stroke Patients
Supervisors :		Dr. Moshera Hassan Darwesh and Dr. Mohamed Soliman El-Tamawy

Abstract :

Background: The aim of this work was to investigate the efficacy of electrical galvanic vestibular stimulation versus mechanical vestibular stimulation on balance in hemiparetic stroke patients. **Subjects and Methods:** sixty male hemiparetic stroke patients represent the sample of this study. The patients' ages ranged from 45 to 61 years. They were assigned randomly into three equal groups; the control group G3 treated by selected therapeutic physical exercise program. The study group G 1 treated by the same program of treatment as the control group in addition to galvanic vestibular stimulation (GVS). The study group (G2) treated by the same program of treatment G3 in addition to mechanical vestibular stimulation on BIODEX system for balance training. The duration of treatment was three months, three times per week. The different aspects of dynamic balance (overall stability, anteroposterior stability and mediolateral stability' indices) were assessed pre and post treatment objectively by Biodex balance system and clinically by Short Form of Berg Balance Scale (SFBBS) in all groups. **Results:** Comparison of each variable pre and post treatment in each group revealed a significant improvement in all different parameters in study groups (G 1 & G2) $P \leq 0.05$; hpwever the control group showed a significant improvement only in anteroposterior stability index. Comparison of post treatment results of the three different groups showed that GVS used in study group G 1 showed significant reduction in muscle tone than groups two and three (02 & G3). **Conclusion:** GVS and Biodex balance system have significant effect on treatment of balance disorders in stroke patients.

Keywords:

Stroke; Galvanic vestibular stimulation; Dynamic balance; Biodex balance system.

Name	**:**	**Yassmin Essam Mohamed Salem**
Faculty	**:**	**Physical Therapy**
Dept.	**:**	Biomechanics
Degree	**:**	M.Sc.
Title of Thesis:		Evaluation of Muscle Strengths and Myoelectric Activities of Scapular Rotators in Patients with Impingement Syndrome
Supervisors :		Dr. Ghada Mohamed El-Hafez, Dr. Ahmed Yousry Radwan and Dr. Amira Abdallah A. Abdallah

Abstract :

Background: Changes in muscle activities and forces attracted attention during studying shoulder impingement syndrome. **Purpose:** The purpose of this study was to investigate and compare the myoelectric activities and peak isometric muscle forces of scapular rotators in the injured and non-injured sides in patients with unilateral shoulder impingement syndrome. Additionally, the relationship between the changes in myoelectric activities and the changes in peak isometric muscle forces between the injured and non-injured sides were investigated. **Methods:** Twenty-one patients with unilateral shoulder impingement syndrome (mean age 38.68 ± 9.73 years, height 1.66 ± 0.075 m, and weight 77.28 ± 11.36 Kg) participated in the study. The myoelectric activities of the scapular rotators (upper, middle, and lower trapezius and serratus anterior muscles) were measured during active free arm elevation in the scapular plane from 30˚ to 120˚. Additionally, the peak isometric individual muscle force of the scapular rotators was measured using a hand held dynamometer. **Findings:** MANOVAs showed no significant difference in the myoelectric activities of the scapular rotators between both sides ($p = 0.285$). However there was a statistical siginificant difference in the peak isometric forces between both sides ($p = 0.011$). Multiple comparison tests revealed that there were significant decrease in the peak isometric forces of the upper, middle, and lower trapezius ($p = 0.00$, 0.040, and 0.040) respectively in the injured sides compared with the non-injured sides. However, there was non-significant difference in the peak serratus anterior muscle force between both sides ($p = 0.345$). Finally, the bivariate correlations revealed that there was significant weak positive correlation between the changes in the myoelectric activities and the changes in the peak isometric muscle forces of the upper trapezius muscle. **Interpretation:** Based on the previous findings, it may be concluded that patients with shoulder impingement syndrome have abnormal muscle strengths at the scapulothoracic musculature and abnormal neuromuscular integration.

Keywords:

Shoulder impingement syndrome; Myoelectric activities; Hand held dynamometer; Scapular rotators.

Engineering Sector

- **Engineering**
- **Computer and Information**
- **Urban Planning**

Name : **Yasser Reda Abdel H. EL-Ghazouly**

Faculty : **Engineering**

Dept. : Metallurgical

Degree : Ph.D.

Title of Thesis: Electrodeposition and Characterization of Nanocrystalline Ni-Fi Alloys

Supervisors : Dr. Saad El-Raghy, Dr. RandaAbd El-Karim and Dr. Madiha Ahmed Shouaib

Abstract :

Increasing the Ni/Fe ration, the nickel content in the deposited layers increases, and loads to a decrease in the precipitates particle size which became finer and smaller in size. Nano-crystalline electrodeposited Fe-Ni alloys are composed of two phases. Ni and FeNi3 phases for a range of Ni/Fe ratio. The intensity of FeNi3 increases with the increase in the deposition time.

Keywords:

Nanotechnology; Electroplating; Corrosion; Electroplating bath; Phases.

***Name* :** **Hany Nasr Hassan Mohammed**

***Faculty* :** **Engineering**

***Dept.* :** Mathematics and Physics

***Degree* :** Ph.D.

Title of Thesis: Solving Cubic and Coupled Nonlinear Schrodinger Equations using the Homotopy Analysis Method

Supervisors : Dr. Magdy Abd El-Atty El-Tawil

Abstract :

The homotopy analysis method (HAM) is one of the important analytical methods , which introduces a series solution for nonlinear problems. HAM Contains the auxiliary parameter ħ which gives a way to adjust and control the convergence region of series solution. New application of homotopy analysis method are introduced using the parameter ħ to guarantee the convergence of the series solutions of nonlinear differential equations.

Keywords:

Homotopy analysis method; Auxiliary parameter ħ modified HAM; Nonlinear differential equations; System of differentid equations.

***Name* :** **Moustafa Ramadan Ahmed Nabawy**

***Faculty* :** **Engineering**

***Dept.* :** Aerospace

***Degree* :** M.Sc.

Title of Thesis: Aerodynamic Shape Optimization of a Morphing Micro Air Vehicle Wing for Roll Control

Supervisors : Dr. Mohamed M. Abdelrahman, Dr. Gamal Mahmoud S. El-Bayoumi and Dr. Mokhtar Malek El-Nomrossy

Abstract :

Morphing is considered as a mean to adapt an air vehicle to changing mission requirements or flight conditions. The concept of wing morphing presents several opportunities either for mission adaptation or for flight control involving primarily, small, continuous adjustments in the shape of the wing and/or surrounding flow field to maneuver the aircraft during flight. This thesis presents a newly developed process for the design of the anti-symmetric twist distribution that should be imposed for the roll control of a Micro Air Vehicle (MAV) wing instead of using conventional ailerons. It starts with discussing the implementation of wing morphing for roll control on the conceptual design phase. The use of Response Surface Modeling (RSM) to construct a twist constraint function applicable to a MAV conceptual design stage is investigated. The aerodynamic design optimization of a morphing MAV wing for roll control is then presented. The obtained aerodynamic results are compared and validated using experimental (wind tunnel measurements) and numerical (Panel and CFD) methods. The static and dynamic stability of the MAV are then discussed. Both longitudinal and lateral control modes as well as the MAV frequency response are studied. Finally, direct and inverse simulations are performed using the complete nonlinear six degrees of freedom equations of motion.

Keywords:

Morphing wing; Micro air vehicle; Aerodynamic optimization; Lifting line theory; Modified feasible directions algorithm; Response surface methodology; Wind tunnel experiments; CFD.

Name **:** **Maher Abdelkhalek Azzouz**

Faculty **:** **Engineering**

Dept. **:** Electrical Power and Machines

Degree **:** M.Sc.

Title of Thesis: Adaptive Fuzzy Logic Control of Wind Energy Conversion Systems

Supervisors : Dr. Adel latif El-Shafei and Dr. Hassan Rashed Emare

Abstract :

Fuzzy logic is a convenient approuch to construct maximum power trenching and control algorithms in wind energy conversion systems New adaptive techniques are developed.

Keywords:

Fuzzy logic; Wind energy; Maximum power trenching; Adaptive control.

Name **:** **Mohamed Hisham Abdel-Aziz**

Faculty **:** **Engineering**

Dept. **:** Structural

Degree **:** M.Sc.

Title of Thesis: Application of Building Information Modeling in Infrastructure Bridges

Supervisors : Dr. Mohamed Mahdy Marzouk

Abstract :

Building Information Modeling is a great innovation in engineering and construction industries. (BIM) depends on developing 3D intelligent model, and using this model in different uses such as: creating drawings, cost estimation, scheduling of construction activities, 3D Visualization, and many other uses. Applying (BIM) technology on bridges is named Bridge Information Medaling (BRIM). The research proposes using Bridge information Medeling (BRIM) in preconstruction phase.

Name **:** **Hassan Mahmoud Hassan Ahmed Saad**

Faculty **:** **Urban & Regional Planning**

Dept. **:** Urban Design

Degree **:** Ph.D.

Title of Thesis: Social & Economic Benefits for Urban Heritage Conservation "Towards A Methodology for Continuity & Implementation the Local Conservation Projects & Programs"

Supervisors : Dr. Sameh Abd A. El Alaily and Dr. Tarek W. Mohamed

Abstract :

Because of limiting resources and lake of possibilities for financing of local urban conservation projects , the choice of " Social & economic benefits for urban heritage conservation " To Recognize the feasibility of investment in the heritage areas and to encourage the channelling of investments to implement this programs and projects, To achieve this , the research propose a conceptual framework for a multi-faceted methodology includes : providing with an executive framework for the sustainability of urban heritage conservation projects , Developed a conservation methodology by inclusion the social-economic analysis within this methodology and propose a model for Finance Through partnership between private / public sectors , private investments and banking finance for continuity & implementation the local urban heritage Conservation Projects.

Keywords:

Cultural heritage; Urban conservation; Valuing heritage; Social & economic benefits; Heritage sites investment; Creation finance tools; Private/public partnership; Private investments; Banking finance.

Name : **Mohamed El-Sayed Tolba Emam**

Faculty : **Urban & Regional Planning**

Dept. : Urban Planning

Degree : M.Sc.

Title of Thesis: Urban Monitoring and Decision-Making for Sustainable Development "Principles of Complementary Design for Indicators"

Supervisors : Dr. Wafaa Abdul-Moneim Amer

Abstract :

The urban monitoring process is currently one of the most important control mechanisms in the urban development. The cities state has called attention to develop indicators of development for describing the humanitarian situation in the society (standard of living and quality of life). From this point of view, thinking in research has started, as efficiency of urban monitoring process and functioning it in generating feedback with high value to the planning process related to the appropriate indicators design. The range of indicators packages comprehension, its integration and opposition. in addition to multiple bodies there is no governing frame and unified national monitoring system for managing the planning process to urban areas in Egypt.

In this context, the main objective of study is interested in how to input urban indicators process as an-organic part in the stages of the planning process (diagnosis the current situation, planning objectives "formulation of objectives" , follow-up and evaluation) through developing an integrated structure to the urban indicators able to manage the planning process of urban areas.

where The research has been discussed through three main parts as follows:

Part one: theoretical entrance, which includes the following:

1-1- Therotical frame work for using the indicators in decision making process and analyzing interaction between both planning methods and decision making process through monitoring the data importance as one of the most important aspects of knowledge.

1-2- rising the idea of urban indicators and their uses. And determine the available p3ckages of local and international indicators.

1-3- practices of some countries in using indicators as evidence.

1-4- The most important difficulties and challenges which face using indicators in management of urban development process.

Part two: Applied part, which includes the following:

2-1- Review the temporal and spatial frame of the application field.

2-2- Explanation of the applied idea in details (through using urban schemes which have been done to the Egyptian cities after being classified functionally and according to its urban order due to the development rates, arranging these schemes temporarily to track the development of the automatic use of indicators in the preparation of scheme stage.

2-3- Extraction of the indicators package which has been used in these schemes and distributed it on the packages of issues the schemes dealt with.

Part three: Formulation and elaboration of findings and recommendations, which includes the following:

3-1- compare what has been reached by application with lists displayed above in the theoretical entrance in addition to indicators list of the General Authority for Urban Planning, adopted in 2006, then review them on issues discussed in the applied part .

3-2- Extract the full package of indicators that can be used in the preparation, implementation and follow up of schemes and Set up an approximate framework of the necessary indicators package for use during the preparation process, then implementation process and then evaluation.

Finally, the research of thesis subject is nothing more than a hard trial to developing an integrated structure of urban indicators for application in Egyptian cities in preparation of urban planning as a frame for managing urban areas.

Name **:** **Hanan Mohamed Mohamed Moussa**

Faculty **:** **Computers and Information**

Dept. **:** Information System

Degree **:** Ph.D.

Title of Thesis: A Framework for Effort Estimation in Software Projects

Supervisors : Dr. Galal Hassan Galal-Edeen and Dr. Amr Kamel

Abstract :

The thesis proposes effort estimation framework which enhances estimated effort by enhancing sizing adjustment factors. Enhancing sizing adjustment factors is achieved by grouping technical complexity factors to two adjustment factors (difficulty and distribution) and by adding a third adjustment factor which is quality of requirements. Quality of requirements is a project environmental factor. The framework concentrated on a sample of Egyptian companies with an objective to enhance effort estimation in these companies. The proposed effort estimation framework obtained improved results with respect to effort variance. The original average effort variance was 47% in the sample projects before applying the framework, whereas the average effort variance after applying our proposed framework is 36%. However, the main outcome of this research is the lessons learned from the development of this framework not only the framework itself and its results.

Keywords:

Effort estimation; Functional sizing; Adjustment factors.

***Name* : Omnia Ossama Korany Mohamed**

***Faculty* : Computer and Information**

***Dept.* :** Information System

***Degree* :** M.Sc.

Title of Thesis: Mining Moving Objects Trajectories

Supervisors : Dr. Mohamed E. El-Sharkawi and Dr. Hoda Mokhtar

Abstract :

Moving Object Databases (MOD) are among the emerging research topics that are attracting many work due to their vital need in many applications. Generally, MOD deal with geometries changing over time. With the tremendous advances in positioning technologies, the real time information of moving objects becomes increasingly available. This availability of location information posed challenges to the database research and triggered the need for utilizing data mining and analysis techniques. Data mining techniques, and specially clustering, play an important role in extracting useful knowledge from moving objects' location information, and in discovering hidden patterns in their motion behaviors. In this thesis, we present a novel pattern based clustering framework that adapts the k-means algorithm for clustering moving object trajectory data. The proposed algorithm uses key features of moving object trajectories namely, its direction, slope of motion and time interval as a heuristic to determine the different number of clusters for the k-means algorithm. Our approach overcomes the known drawbacks of the k-means algorithm, namely, the dependence on the number of clusters (k), and the dependence on the initial choice of the clusters' centroids. This dependence on the number of clusters and the initial choice of the centroids affects both the performance and accuracy of the algorithm. In order to overcome this problem, we propose a heuristic that can calculate k at first dynamically based on movement patterns in the trajectory dataset, and optimally initializing the k centroids. In brief, we consider distinct similar moving patterns as an initialization for the number of clusters (k). Moreover, we use the silhouette coefficient as a measure for the efficiency of our proposed approach. Finally, we validate our approaches through experimental study on real and synthetic data that show both the performance and accuracy of our techniques over the traditional k-means and other different clustering algorithms.

Keywords:

Moving object databases; Mining moving object trajectories; Clustering moving objects; Approximate clustering; and Similarity search in moving object trajectories.

Basic Sciences Sector

- **Science**
- **Agriculture**
- **Veterinary Medicine**

Name **:** **Ahmed Moustafa Mansour Ahmed**

Faculty **:** **Science**

Dept. **:** Chemistry

Degree **:** Ph.D.

Title of Thesis: Structural Studies on some Benzimidazole Containing Compounds and Their Palladium and Platinum Complexes

Supervisors : Dr. Nour El-Din Tawfik Abdel-Ghani

Abstract :

This work has been carried out to investigate the structures of some newly prepared benzimidazole derivatives using elemental analysis, FT-IR, 1H NMR, electron impact mass spectrometry (MS), single crystal X-ray diffraction, X-ray powder diffraction, and electronic absorption measurements in different solvents and in solutions of different pH. The Pd(II) and Pt(II) solid complexes with different anions X; X = Cl, Br, I, SCN and NO3; have been synthesized as potential anticancer compounds and their structures were elucidated using elemental analysis, FT-IR, 1H NMR, MS, UV/vis., molar conductance, thermal analysis (TG and DTA) and X-ray powder diffraction. The activation thermodynamic parameters were calculated using non-isothermal methods. The molecular geometries, vibrational frequencies, and 1H NMR of the benzimidazoles L1-9 and their complexes have been calculated by using density functional method. Molecular orbital description HOMO and LUMO were done for the studied complexes. Natural bond orbital analysis (NBO) method was performed to provide details about the type of hybridization and the nature of bonding in the studied complexes. The synthesized ligands, in comparison to their metal complexes were screened for their antibacterial activity and cytotoxicity.

Keywords:

Benzimidazole; DFT; NBO; Cytotoxicity; Platinum complexes.

Name **:** **Rasha Abd EL-Latief Ahmed Auf**

Faculty **:** **Science**

Dept. **:** Chemistry

Degree **:** Ph.D.

Title of Thesis: An Electrochemical Biosensor Based on Properties of Anionic Surfactant on Polymeric Surface for the Electrostatic Determination of some Neurotransmitter Compounds and Drugs

Supervisors : Dr. Nada Farouk Ahmed Atta

Abstract :

An electrochemical sensor was developed by using poly(3, 4-ethylene-dioxythiophene) modified platinum electrode in presence of sodium dodecyl sulphate (SDS). This sensor modified electrode is selective for the determination of some catecholamine neurotransmitters, some dihydroxyl compounds of interest as well as drugs in presence of interference molecules such as uric acid, ascorbic acid and glucose.

Electrochemistry of the indicated compounds was studied at this electrode in the presence and absence of SDS and interesting electrocatalytic effects were found. The presence of SDS in the medium plays a key role in the electrostatic attraction of these compounds towards the polymeric surface and causes repulsion towards the interfering compounds. Cyclic voltammetry (CV), linear sweep voltammetry (LSV), ultraviolet (UV), nuclear magnetic resonance (NMR) and electrochemical impedance spectroscopy (EIS) were studied to verify the voltammetric behavior in micellar media. The designed sensor showed good reproducibility, high stability, sensitivity and anti-interference ability. The sensor was further utilized to determine neurotransmitters and drugs level in human urine and satisfactory results are obtained with low detection limit.

Keywords:

Surfactant; Conducting polymers; Sensor; Catecholamine neurotransmitters; Dopamine; Ascorbic acid; Morphine; Atropine; SEM.

Name **:** **Ibrahim M. Sadiek Mohammad**

Faculty **:** **Science**

Dept. **:** Chemistry

Degree **:** M.Sc.

Title of Thesis: Electrocatalysis of the Oxygen Evolution Reaction at Metal Oxide Nanostructured Modified Electrodes

Supervisors : Dr. Mohamad El-Sayed El-Shakre, Dr. Mohammad Saada El-Deab and Dr. Ahmad Mahmoud Mohammad

Abstract :

This thesis introduces cheap metal oxides in nanometer-size as novel electrocatalysts for water electrolysis, with a special emphasis on the oxygen evolution reaction (OER). The enhancement in the electrocatalytic activity towards the OER at GC, Au, and Pt electrodes modified with nano-NiOx, nano-CoOx or a binary mix of them has been studied. The cyclic voltammetry (CV) and the linear scanning voltammetry (LSV) measurements are used to characterize the modified electrodes. The morphology of the fabricated nano-MOx is revealed by the SEM. The phase identification is achieved by the XRD analysis. The nature of the substrate and the stability of the fabricated nano-catalysts are investigated. The operating parameters, e.g., electrolyte pH and the loading level of the nano-MOx are optimized. Information about the proposed mechanism for the OER in alkaline medium is obtained from Tafel slopes. The impact of using binary electrocatalsts on the stability and the electrocatalytic activity is investigated. An electrocatalyst of optimum loading of both oxides is prepared.

Keywords:

Nanostructures; Electrocatalysis; Oxygen evolution; Water electrolysis; Metal oxides.

***Name* : Mahmoud Yousef Aly Wahba Hashim**

***Faculty* : Science**

***Dept.* : Physics**

***Degree* : M.Sc.**

Title of Thesis: Bulk and Shear Viscosity in the Early Universe Cosmology

Supervisors : Dr. Hesham Mohamed M. Mansour and Dr. Abd El-Naser Tawfik

Abstract :

We consider the evolution of a flat, isotropic and homogeneous Friedmann-Lemaitre-Robertson Walker Universe, filled with a causal bulk viscous cosmological fluid that can be characterized by an ultra-relativistic equation of state, and bulk viscosity coefficient obtained from recent lattice Quantum Chromo dynarnics calculations. The basic equation for the Hubble parameter is derived under the assumption that the total energy in the Universe is conserved. By assuming a power law dependence of bulk viscosity coefficient, temperature and relaxation time on energy density, an approximate solution of the field equations has been obtained, in which we utilized equations of state from recent lattice Quantum Chromo dynamics simulations and heavy-ion collisions to derive an evolution equation. In viscous cosmology, there is no evidence for singularity. For example, both Hubble parameter and scale factor have a finite value at time equal to zero. To avoid any controversial argumentation about the validity of the equations of states and the above conclusions, we restrict the discussion at the QCD era. Here, the evolution of essential cosmological parameters, like Hubble and scale parameters, in viscous background geometry is obviously modified than in non-viscous one.

Keywords:

Hubble parameter; Viscous medium; Early universe; QCD; Cosmology.

Name **:** **Mahmoud Abdel-Hamid Mohamed**

Faculty **:** **Agriculture**

Dept. **:** Dairy Science

Degree **:** Ph.D.

Title of Thesis: Studies on the Biological Actions of Some Nitrogenous Whey Products

Supervisors : Dr. Soad Hassan Taha, Dr. Abd El-Gawad Imam Abou-Dawoud and Dr. Mahmoud Zaki Sitohy

Abstract :

This study was conducted to investigate the biological actions of some nitrogenous whey products namely, whey protein isolate, whey protein hydrolysate, α-lactalbumin, β-lactoglobulin, lactoferrin and glycomacropeptide .

Experiments were carried out to: i) study antiviral activity of native and esterified whey protein fractions against tomato yellow leaf curl virus (TYLCV) and influenza A virus subtype H5N1; ii) study the hepatoprotective effect of whey protein products against liver steatosis in rats .

The obtained results indicated that the antiviral activity of the used whey protein fractions against TYLCV can be arranged in a descending order as follows: lactoferrin (native or modified form) > native α-lactalbumin > modified β-lactoglobulin > modified α- lactalbumin = native β- lactoglobulin.

Esterification of whey protein fractions has further enhanced their antiviral activity against H5N1 in a concentration dependent manner. In response to protein concentration going from 20 to 80 µg/ml, Met-α-LA was the lowest active antiviral protein, while both Met-BLG and Met-LF reached the maximum antiviral influence when the protein concentration was 80µg/ml.

Rat feeding experiments revealed that oral administration of whey protein products reduced the level of aspartate&alanine aminotransferase (ALT& AST) and the level of malondialdehyde in liver, increased the level of liver glutathione and enhanced liver histology comparing with the infected control.

Keywords:

Whey proteins; Esterification; H5N1; TYLCV; Steatosis.

***Name* :** **Azza Abd El-Moneam A. Omran**

***Faculty* :** **Agriculture**

***Dept.* :** Agricultural Biochemistry

***Degree* :** Ph.D.

Title of Thesis: Biochemical Studies On Sorghum

Supervisors : Dr. Abd El- Moneim M. Radwan Afify, Dr. Hossam El-Din Saad El-Beltagi and Dr. Samiha Mohamed Abd El-Salam

Abstract :

The present research work was carried out to eliminate the anti-nutritional factors (ANFs) associated with sorghum grains and to improve iron and zinc bioavailability and protein digestibility by different treatment. In order to achieve the previous aims, the three sorghum varieties named; Dorado, Shandaweel-6 and Giza-15 were subjected to physical, chemical, in vitro biological and technological evaluation. Regarding the physical evaluation, Giza-15 variety was the highest variety in 1000 kernel weight, hectoliter and extraction of whole flour. Regarding the chemical evaluation and ANFs Shandaweel-6 was the highest variety in crude protein content and crude fiber. Dorado was the highest variety in fat and ash. After treatments, the different proximate analysis were decreased related to the untreated sorghum. Dorado, Shandaweel-6 and Giza-15 had the highest amount of vanillic acid, ferulic acid, and protocatechuic acid respectively. Shandaweel-6, Dorado and Giza-15 had the highest amount of luteolin, kaempferol and catechin, respectively. After treatments, phenolic acids, flavonoids, tannins, antioxidant activity and phytate were decreased. After soaking and germination, the phyt/Fe molar ratios were increased while the phyt/Zn molar ratios were decreased. After soaking and germination protein solubility was significantly increased while, after cooking and fermentation protein solubility was significantly decreased. Regarding protein fractions, there was an increase in albumin and kafirins proteins after soaking. After cooking, there was a decrease in albumin and kafirins proteins. While, after germination and fermentation there was an increase in albumin, globulin and kafirin proteins. Shandaweel-6 was the highest variety in protein solubility. Shandaweel-6 and Giza-15 were the highest variety in water holding capacity (WHC) and oil holding capacity (OHC), respectively. After cooking and fermentation, there was a significant increase in WHC. After germination, there was a significant increase in OHC. Regarding to the in vitro biological evaluation, protein digestibility was significantly improved as a result of soaking and germination treatments especially for Giza-15. Also, iron and zinc bioavailability

was significantly improved because of soaking, germination and fermentation treatments. Giza-15 was the highest variety in iron bioavailability after germination and fermentation treatments. While, Shandaweel-6 was the highest variety in zinc bioavailability after germination treatment. Regarding, technological evaluation, sorghum biscuits had the acceptable color. After treatments, there were non significant differences between treatments in taste comparing to wheat biscuit. Hardness of sorghum biscuits was lower than wheat biscuit except for germination treatment.

Keywords:

Sorghum; Soaking; Cooking; Germination; Fermentation; Phytate; Phenols; Protein digestibility; Bioavailability of iron and zinc.

***Name* : Abdelrahman Saleh Zaky Ahmed**

***Faculty* : Agriculture**

***Dept.* :** Agricultural Microbiology

***Degree* :** M.Sc.

Title of Thesis: Microbiological and Chemical Quality of Active Dry Yeast

Supervisors : Dr. Zakaria Y. Daw, Dr. Moawad K. Zahra and Dr. Nasr F. Nasr

Abstract :

There is an increasing demand for baker's yeast to satisfy the needs of over growing population. This necessitates that efforts be made to ensure their hygienic suitability and functional quality. This study was, therefore, executed to monitor the microbial content of 9 different brands of active dry yeast (ADY) and the Egyptian compressed yeast. In this regard, the compressed yeast recorded the worst microbiological quality where all samples contained a massive amount of total and faecal coliforms as well as 50% of samples contained salmonella. On the other hand, ADY recorded better result as percentage of unacceptable samples; total coliforms (23.3%), faecal coliforms (17.8%) and Salmonella (4.4%).

The leavening ability of yeast depends on its viability and chemical composition. Concerning yeast cell viability, the compressed yeast revealed the highest viability (96.9%) while the viability of ADY brands ranged from 23 to 78.3%. All samples contained fair amounts of lipids and proteins while the intracellular trehalose - which generally believed to be a critical parameter for its resistance to stress such as drying - ranged from 7.89 to 28.8% .

The most important role of yeast in bread making is raising the dough to produce the characteristic loaf preferred by consumers. Therefore, evaluating the rising power (RP) and the main parameters affecting the RP includes; temperature, amount of yeast, salt and sugar concentrations were considered. Findings of this study recorded far difference in RP between the local and imported brands especially those from UK and China. Most brands required a specific temperature (35 or 40° C) to give the maximum RP while some brands gave almost the same RP value in wide range of temperatures. Results indicated a positive correlation between yeast amount and RP while a negative correlation between salt concentration and RP was occurred. Furthermore, adding sugar up to 1.5% to the dough did improve the RP of some brands by 25% .

It was rather interest to investigate the most efficient conditions for baker's yeast production. Thus, 4 strains of Saccharomyces cerevisiae were isolated from different commercial ADY. The Isolates were tested for five parameters including

initial yeast level, molasses concentration, urea requirements, pH-value and agitation speed. The results recommend adjusting the cultivation medium at 10% molasses with 0.15% urea at pH 5. The medium was then inoculated by the yeast strain to obtain the initial count of 103 cells / ml. Then the flasks were incubated in orbital shaker (150 rpm) at 30°C for 24 hours.

Keywords:

Saccharomyces cerevisiae; Microbiological quality; Viability; Rising power; Trehalose; Baker's yeast production.

***Name* :** **Hend Mohamed Abd El-Ghany Farag**

***Faculty* :** **Agriculture**

***Dept.* :** Agricultural Botany

***Degree* :** M.Sc.

Title of Thesis: Morphological and Anatomical Studies of Artemisia Vulgaris L. and Santolina Chamaecyparissus L. (Asteraceae)

Supervisors : Dr. Kassem Fouad El-Sahhar and Dr. Rania Mohamed Nassar

Abstract :

The main objective of the present study was to carry out a detailed botanical study (phytography) of two plant species; namely, Artemisia vulgaris L. and Santolina chamaecyparissus L. under local conditions to get a better insight on their morphology and anatomy; in addition to the volatile oil composition. Plant identification and authentication procedures were carried out at the Herbarium, Flora & Phyto-Taxonomy Researches, Horticulture Research Institute, Agricultural Research Center, Dokki, Giza, Egypt (CAIM). Cultivation was carried out on October 20th., 2006 and the field work lasted to February 2009. The experiment was designed in RCB at the rate of 4 replicates (a replicate 3×4 m, 5 ridges 60 cm apart and plants 50 cm distance in between). Two plants were designated in each of the four replicates (total of 8 plants) of each of the studied species to follow up the vegetative characters at monthly intervals. Anatomical studies were carried out for various organs of the two studied plant species. At opened flowers stage, the volatile oil of mugwort composed 32 components and volatile oil of lavender cotton included 36 components.

Keywords:

Anatomy; Artemisia vulgaris L.; Lavender cotton; Morphology; Mugwort; Santolina chamaecyparissus L.; Volatile oil.

Name **:** **Shaymaa Hussein Mohamed Hussein**

Faculty **:** **Veterinary Medicine**

Dept. **:** Cytology and Histology

Degree **:** Ph.D.

Title of Thesis: Seasonal Changes in the Histology and Histchemistry of the Adenohypophysis, Testes and Ovaries of Nile Tilapia (Oreochromis Niloticus)

Supervisors : Dr. Mohamed A. El-Sakhawy, Dr. Mamdouh A. El-Sammaa, Dr. Abd El-Aleem A. El-Saba and Dr. Mohamed I. Abd Rabou

Abstract :

The investigation carried out on the pituitary gland, testes and ovaries of apparently healthy Nile tilapia. the pituitary gland differentiate into two well distinguished areas, the adenohypophysis and neurohypophysis. the adenohypophysis divided into three histologic ally region: rostral pars distalis, proximal pars distalis and pars intermedia with no clear demarcation. the neurohypophysis penetrate all region of the adenohypophysis. the adenohypophysis differentiate into seven types of glandular cells arranged in mosaic appearance: lactotrops, somatotrops, corticotrops, thyrotrops gonadotrops, melanotrops and somatolactotrops, in addition to chromophobes. during non breeding season (winter), the adenohypophyseal glandular cells were smaller, less in field occupation and less in the intensity of their staining reaction. during the breeding season the ovary was surround by thin tunica albuginea. the oviggerous lamellae contain oocyte in active vitellogenesis, in addition, atretic and postovulatory follicles were increased. during winter, the tunica albuginea reached maximum thickness and coni:ain oocyte in previtellogenic stages. during breeding season, the testis surround by thin tunica albuginea. the testicular tubules filled with germinal cysts which contain,germinal cells at different stage of development and surround by sertoli cells. th interstitium filled with abundant Leydig cells and blood capillaries. during winter the testis appeared evacuated from spermatozoa with no cystic arrangement of the germinal cells.

Keywords:

Nile tilapia; The pituitary gland; The adenohypophysis; Ovary; Testis.

***Name* :** **Mona Khames Galal Mabrouk**

***Faculty* :** **Veterinary Medicine**

***Dept.* :** Biochemistry and Chemistry of Nutrition

***Degree* :** Ph.D.

Title of Thesis: Molecular Study on some Genes of Milk Proteins in Cattle and Buffaloes

Supervisors : Dr. Samy Ahmed Abdel Aziz, Dr. Mohsen Ahmed Wasfy and Dr. Eman Moawad Gouda

Abstract :

β-lactoglobulin (β-LG) and alpha lactalbumin(α-La) are the main proteins present in whey. Its polymorphic genes affect economical traits in cattle breeds. The present study aims to identify the phenotypes, genotypes and allelic frequencies of both genes among local cattle breeds and buffalo in Egypt, as the phenotyping and genotyping of these genes have not been extensively studied yet in these breeds. Milk samples from Holstein, Baladi cattle and buffalo were assayed for phenotyping of both genes as well as well as some milk protein traits. Genotyping of β-LG and α-La were performed by PCR-RFLP and SSCP techniques. The most frequent genotype for β-LG in Holstein cattle was AB and in Baladi cattle and buffalo was the BB variant. While in α-La gene three genotypes AA, AB and BB were detected in all studied breeds with different frequencies. These results could be included into marker assisted selection programs to improve response to selection in these local breeds.

Keywords:

β-LG; α-La; Phenotype; Genotype; Cattle and buffalo.

***Name* :** **Enas Sayed Abd El-Azize**

***Faculty* :** **Veterinary Medicine**

***Dept.* :** Poultry Diseases

***Degree* :** M.Sc.

Title of Thesis: Comparative Studies Between an Attenuated Anticoccidial Vaccine and Different Anticoccidial Drugs in Broilers

Supervisors : Dr. Medhat Abdel-Hady, Dr. Diaa Eldin G.A Khelfa and Dr. Khalid Sayed Shaban

Abstract :

Twelve broiler farms in different governorate (six were vaccinated with coccivac-B and six used different anti-coccidial drugs) were used for comparing efficacy of anti-coccidial drugs versus to anticoccidial-vaccine as preventive measure against coccidiosis in broilers. Criteria for evaluation were clinical signs, dropping score and mean lesion score at 21^{th}, 28^{th} days of age and day before slaughter, production index and mortality% at the end of production cycle. Results revealed that vaccinated farms increase clinical signs and dropping score at 21^{th} and 28^{th} days of age in comparing with medicated farms, meanwhile, at day before slaughter vaccinated farms decrease clinical signs and dropping score in comparing with medicated farms. Mortality % was higher value in medicated farms than vaccinated ones. Production index was higher in vaccinated farms in comparing with medicated ones. Oocysts counts were higher value at 21^{th} day of age in vaccinated farms in comparing with medicated ones and vice versa at 28^{th} day of age and day before slaughter. Mean lesion score decreased in vaccinated farms in comparing with medicated ones after 21^{th} day of age. E.tenella was isolated and identified. Determination of LD50 of identified E.tenella. Experimentally coccivac -B (anti-coccidial vaccine) and diclazuril 0.55% at dose of 2ppm (20gm /50kg) were compared as preventative measure against field isolate of E.tenella under floor pen condition. Criteria for evaluation were clinical signs, droppings score, mortality, mean lesions score, oocyst counts histopathology and performance (mean body weight, mean weight gain, feed intake and feed conversion ratio). Vaccinated group decreased dropping score, lesion score, oocysts count and histopathological lesion score in comparing with medicated group. No mortality was recorded in both vaccinated and medicated groups. No significant difference between vaccinated and medicated groups in mean body weight and feed conversion ratio. There is a slight decrease in mean weight gain and feed intake in vaccinated group in comparing with medicated ones.

Keywords:

Anti coccidial drugs; Anti coccidial vaccine; Coccivac-B; Diclazuril; Broiler; chicken coccidiosis; E.tenella; Performance.

***Name* : Shaymaa A. Mohamed Abd El-Hafez**

***Faculty* : Veterinary Medicine**

***Dept.* :** Microbiology

***Degree* :** M.Sc.

Title of Thesis: Seasonal Changes in the Histology and Histochemistry of the Adenohypophysis, Testes and Ovaries of Nile Tilapia (Oreochromis Niloticus)

Supervisors : Dr. Rafik Tawfik Soliman and Dr. Khaled Farouk Abd El-Hamid Mohamed Al amry

Abstract :

Paratuberculosis or Johne's disease is chronic wasting disease which is characterized by watery diarrhea, loss of weight and decrease of production accompanied with emaciation. The disease is caused by **Mycobacterium avium subsp. paratuberculosis,** which is isolated from humans infected with Crohn's disease. Collection of 109 fecal and serum samples, were tested for acid-fast staining, culture, ELISA and IS900 PCR, and it was found that 57 (52.29%) were positive fecal samples to staining, 10 (9.17%) were positive fecal samples to culture, 13 (1] .93%) were positive serum samples to ELISA and 16 (14.68%) were positive fecal samples to IS900 PCR. Comparative studies were made by calculation of sensitivity and specificity of each test when using the culture and IS900 PCR as master test. IS900 sequencing of three isolates with the standard strain was made, and one new **Egyptian Sequevar** was found. Also, a phylogenetic tree was formed according to IS900 sequencing.

Keywords:

Johne's disease; Mycobacterium avium subsp; Paratuberculosis; Staining; Culture; ELISA; IS900PCR; SN%; SP%; PPV%; NPN%; IS900 sequencing.

Inter/Multidisciplinary and Future Sciences Sector

- **National Laser Institute**
- **African Studies Institute**
- **Institute of Statistical Studies and Research**

Name	**:**	**Ahmed El-Hussein Mohamed Kamel**
Faculty	**:**	**National Laser Institute**
Dept.	**:**	Laser Applications in Metrology, Photochemistry &Agriculture
Degree	**:**	Ph.D.
Title of Thesis:		Applications of LIBS and LIF Techniques in the Diagnosis of Breast and Colorectal Human Cancer (In Vitro Study)
Supervisors :		Dr. Mohamed Abdel Harith Mohamed, Dr. Hoda Mohamed Ismail and Dr. Arafa Kamal Kassem

Abstract :

Cancer diagnosis and classification is extremely complicated and, for the most part, relies on subjective interpretation of biopsy material. Conventional methods are laborious and in some cases may result in different contradicting results depending on the histopathologist performing the examination. In the present work we are presenting a detailed in vitro study for cancer diagnosis using two spectrochemical analytical techniques namely, laser induced breakdown spectroscopy (LIBS) and laser induced fluorescence (LIF). LIBS as a quick and simple method for spectrochemical analysis to identify and characterize some types of human malignancies via detection of the abundance of certain elements namely calcium and magnesium in such tissues with respect to the non - neoplastic ones. Because of the bad LIBS signal to noise ratio in case of fresh tissues, the measurements have been performed under vacuum (10-2 Torr) and the samples were frozen down to -196 oC in a specially designed vacuum chamber. Significant discriminating results have been obtained in case of breast and colorectal cancers indicating the possibility of adopting LIBS in the early detection of the malignancy as well as the identification of the severity and the grade of the disease. Among laser spectrochemical analytical techniques, fluorescence spectroscopy is an evolving technology that can rapidly differentiate between non - neoplastic and malignant tissues. These differences are thought to be due to endogenous fluorophores, including nicotinamide adenine dinucleotide, flavin adenine dinucleotide, tryptophan, and absorbers such as β- carotene and hemoglobin. This technique is a non-invasive diagnostic tool that can identify diseased tissue sites in vivo and in real time. In this way, it could have a major impact on the detection and treatment of cancer. The current study evaluates the utility of autofluorescence spectroscopy to distinguish tissue transformation associated with the malignant change in two types of human cancer, namely breast

and colorectal cancer. Important information pertaining to fluorescent structure might be lost with the use of a single excitation wavelength, but might be obtained with other excitation wavelengths and thus enhancing the diagnostic capability of the obtained tissue spectra. For this reason, fluorescence spectra in the present work were obtained using a high-sensitivity fiber optic spectrometer and two types of excitation sources, an argon ion laser with an emission at wavelength 488 nm and a xenon lamp with nearly constant intensity in the range from 300-800 nm.The obtained results show a remarkable demarcation in case of breast and colorectal cancers indicating the feasibility of using LIF technique in the early detection of malignancy as well as the identification of the severity and the grade of the disease. This study presents reliable and highly sensitive spectroscopic techniques for in vitro measurements and demonstrated that future in vivo measurements are also feasible and reliable using especial endoscopic systems for delivery of laser beam and collection of the emitted plasma and fluorescent light. Another advantage of these techniques is providing new tools for better understanding the cancer biology.

Name **:** **Dina Mohamad Mohamad Atwa Khlil**

Faculty **:** **National Laser Institute**

Dept. **:** Laser Science and Interactions

Degree **:** M.Sc.

Title of Thesis: Quantum Confinement Effect on the Performance of Semiconductor Device

Supervisors : Dr. Yehia Badr and Dr. Iftitan Al-Sayed Mohammad

Abstract :

In this work, we present the experimental results of the deposited thin films of semiconductor materials (ZnS and PbS) on two different substrates: sapphire, and quartz using 308 nm Excimer laser pulses of 2.5 J/cm2 at a repetition rate of 100Hz. The crystalline targets ZnS or PbS was kept at 5 cm apart of the substrate in a clean chamber evacuated by diffusion pump to a base pressure of 5x10-5 Torr. The deposited film thickness was measured by Fizuea technique. Characterization of the thin films' surface morphology, crystal structure, optical and electrical properties is investigated. Elemental analysis of the deposited films compared to the bulk target was obtained via laser induced fluorescence of the produced plasma particles and the energy dispersive X-ray "EDX" technique. The effect of material's quantum confinement on modifying their properties is then presented. Finally, we could use the prepared confined PbS thin films in two different important applications those were; IR photo detector and Hall Effect sensor.

Keywords:

Pulsed laser deposition; Thin film preparation; Quantum confinement; Semiconductors nanolayer; PbS thin film.

***Name* :** **Mohamed Saied Abas Gab Allh**
***Faculty* :** **African Studies Institute**
***Dept.* :** Natural Resources
***Degree* :** Ph.D.

Title of Thesis: Biotechnological and Biochemical Studies on Ginger (Zingiber officina/e)

Supervisors : Dr. EI-Sayed I. Gaber, Dr. Hussein Sayed Taha and Dr. Usama Ibrahim Aly

Abstract :

This study was carried out in collaboration between Plant Biotechnology Department, Genetic Engineering and Biotechnology Division, National Research Centre, Cairo, Egypt, and Plant Resources Laboratory, Natural Resources Department, Institute of African Research and Studies, Cairo University, during the period from 2008 to 2010. This study includes application of different techniques of plant biotechnology and biochemistry, i.e. tissue culture, in vitro propagation, micro-rhizomes formation, molecular markers and finally characterization the in vitro produced 6¬gingerol in ginger (Zingiber officinale Rosco). The obtained results revealed that, an efficient in vitro propagation method was developed using fresh rhizome sprouting buds. Explants cultured. On MS medium supplemented with 4.5 mg/1 BAP resulted highest rate of shoot multiplication. Shootlets were rooted on half strength B_5 medium supplemented with 1.0 mg/l NAA. In vitro plantlets were transplanted in the green house for hardening and their survival was 80-100% Moreover, callus was induced from young leaves of ginger on revised MS medium supplemented with 3 mg/l 2,4-D. For achievement of shootlets regeneration, callus was further sub-cultured on MS medium supplemented with 1.0 mg/l BAP. Moreover, microrhizomes were induced at the base of the in vitro derived shootlets upon transferred to MS medium supplemented with 9 mg/l BAP and 60-90 g/1 sucrose under 16-h photoperiod within 10 weeks of cultivation. Concerning the biochemical distinguish of ginger regenerated plantlets and in vitro rhizomes formation with ginger original rhizomes was carried put using SDS-P AGE of protein and RAPD¬PCR of DNA. The DNA finger prints and SDS-P AGE markers showed high similarity between them. Moreover, The HPLC analysis showed a pure single peak of 6-gingerol existing in all tested samples.

Keywords:

Zingiber officinale; In vitro propagation; Callus; Regeneration; Microhizomes; Sucrose; BAP; Photoperidism; SDS-PAGE; RAPD-PCR; TLC; HPL and 6-gingerol.

***Name* : Salah Ahmed Mohamed El-Karamany**

***Faculty* : African Studies Institute**

***Dept.* :** Geography

***Degree* :** Ph.D.

Title of Thesis: Role Of Grounwater In Development In Siwa And Gaghboub Oases (Comparative Study)

Supervisors : Dr. Mohamed Abd El-Ghany Seoudi, Dr. Aziza Mohamed Aly Badr, Dr. Mohamed Fahmy El-Housary and Dr. Attia Mahmoud El-Tantawy

Abstract :

This study consists of Five chapters after the introduction in addition to Arabic and English summaries and ended by the conclusions which present the important results and the recommendations aimed to conduct water balance that achieve development from the points of water quantity and quality.

Chapter one discussed the natural geographical features of both siwa and El Gaghbub oases. Those features included the location, geology, geomorpholoyical features, climate, natural plants, soil and water resources.

Chapter two studied the geographical features of people in the two studied oases (volume, growth, distribution and demographic) and factors affecting on the growth. It also studied the economical activities (agriculture, industry and tourism).

Chapter three aims to study the present situation of water in the two studied oases consider in the hydrogeological condition of the two aquifers, their types and their potentials, the sequence stages of using the

Chapter Four studied the role of the groundwater in both studied oases in economical and human developments. The chapter reported the different uses of the groundwater in agriculture, industry, tourism and animal production activities

Chapter Five studied the problems of development which related to the water such as the agricultural development, animal production, economical, industrial development and tourism development. It studied also the role of geographical assessment for the future use of the groundwater in developing the two studied oases. The two studied oases are considered separately closed basins from the point of hydrology. This produces some problems such as the unbalance of environments. There are the groundwater detritions due to the seepage of drainage water as a result of the poor drainage system **The conclusion** includes the results and recommendations which aim to achieve water balance from the points of quantity and quality to serve the integrated developments in the studied oases.

There are also a list of references.

Keywords:

- The geographical features of people in the two studied oases (volume, growth, distribution and demographic) and factors affecting on the growth. It also studied the economical activities (agriculture, industry and tourism)
- The present situation of water in the two studied oases consider in the hydrogeological condition of the two aquifers, their types and their potentials, the sequence stages of using the groundwater
- The role of the groundwater in both studied oases in economical and human developments
- The problems of development which related to the water such as the agricultural development.

Name **:** **Mohamed El-Sayed Ahmed Mahmoud**

Faculty **:** **African Studies Institute**

Dept. **:** Natural Resources

Degree **:** M.Sc.

Title of Thesis: Recent Changes of Lake Nasser Hydrology

Supervisors : Dr. El-Sayed Ibrahim Gaber and Dr. Mohamed Sherif Mohamed

Abstract :

High Aswan Dam Lake evaporation rate was calculated by water budget method, Energy budget method (Priestly Taylor model, 1972), Mass transfer method (Harbeck Model; 1962, Vikulina Model; 1962 and Hyvarinen Model; 1973), Radiation method (Turc model, 1970), Temperature based method (Ivanov model, 1970), Combination method (Penman model; 1948 and Borrelli-Sharif model; 1989). Statistical analysis has been done to find the most appropriate technique of the Lake evaporation calculation, where water budget method was used to evaluate the other methods. Trend analysis was done to explore the changes of the Lake Hydrology in terms of inflows to Lake monthly and average annually and evaporation rates monthly and average annually

The following conclusions are drawn from the present work:

•The Priestley -Taylor model gave the best results with the least percent error, small standard error of estimate, small covariance, high significant correlation coefficient, and gave the closest t- value to zero and the highest probability that the estimated mean would exist in the computed confidence interval at level of significance 0.05. So this thesis recommended this model in evaporation prediction for HADL

•For inflows trend, it was found that, there were no real changes in inflows at any month; even there was no real change annually.

For evaporation trend, it was found that, there were no real changes in evaporation at any month; even there was no real change annually, same as inflows.

Keywords:

High aswan dam lake; Evaporation; Models; Trend.

***Name* :** **Batal Shaban Mohamed Gheriany**

***Faculty* :** **African Studies Institute**

***Dept.* :** Social History

***Degree* :** M.Sc.

Title of Thesis: Al-A'mmah in Songhay State (869 -1000AH/1464 -1591 AD)

Supervisors : Dr. Hussein Sayed Morad and Dr. Sozy Abaza Mohamed Hasan

Abstract :

There is a letter now dominates the contemporary historical studies entirely, which is necessary to trigger a positive step in the field of Islamic history about ways of benefit from the trends of cultural renewable global ,methodological boom (mutation) that has been achieved by modern science, and exploitation of traditional Islamic balance dispersed among the shelves of Arab and foreign cabinets. Then the formulation of this shift in accordance with accurate scientific criteria trying to re-write Islamic history with a scientific inclusive perspective, and upset the traditional lean literature and to dispel some of its basic tenets and Cleared of impurities suspended by fabricated colonial Deductions prejudiced.

To test this innovative vision, the thesis deals with a new topic in the field of African studies, the subject of a public marginalized segments of society in the State of Songhay, a country which formed a major Islamic political entity in West Africa. The importance of the study is that everything we know about the history of the region does not exceed the political details that thrived in the sources and references, while missing the social history and except the poor and the vulnerable from the attention of the Islamic era. As the case was on that way; many of the Orient lists as well as some biased recorded social and cultural history of the study area on the back of a conflict of religions and civilizations, and wrote what they wanted and devoted to this very well about the failure of the experience of Islam in West Africa, or what is known (western Sudan), delivering that the main idea revolved around the region to benefit from European "colonialism" (occupation). In the silence of the sources for the period of study before such propaganda, a researcher was to find on the new sources that were in the books of jurisprudence (juristic) calamity as well as the results of the excavation of archaeological and gravestones were very important factor in re-writing the history of one of the marginalized in the region on the basis of these new sources, which brings together most researchers on its importance and credibility. The thesis make sure that the experience of Islam was successful in the region, through the role of Arab traders and preachers there. So the study, as evidenced by a distinguished

Arab role, can represent one of the pillars of the African-Arab cooperation at the moment The study concluded that Alaa`mmah in Songhay state, won a great deal of marginalization despite their influential rule in the production sectors entirely, and the common suffered from the marginalization of their rulers and sultans , and omission of historians, veterans of these common increased the severity of this marginalization and being busy of talking about what is most important from-from their point of view-that is the role of the Governor. Therefore the researcher recommends the modern researchers to change this theory, and Re-write history from the perspective aware of his real target.

Keywords:

Al-A'mmah; Songhay; Western sudan; Islam in sub; Saharan africa; Social history; Classes of african society.

Name **:** **Eman Darwish Abou Elela**

Faculty **: Institute of Statistical Studies and Research**

Dept. **:** Mathematical Statistics

Degree **:** Ph.D.

Title of Thesis: A Thesis presented as Partial Fulfillment for the Degree of Doctor of Philosophy in Mathematical Statistics

Supervisors : Dr. Ahmed Fouad M. Attia

Abstract :

Some systems are able to perform their task with partial performance, failure of their components lead to degradation of performance. Such systems or components have one working state and two or more different failure states, these systems are called multi state System (MSS).

The MSS was first introduction by Murchland (1975). For the past thirty years, there has been an increasing interest in the study of the MSS.

This thesis presents the preventive maintenance problem of the multi state system considering the three state system, assuming the exponential distribution for failure times and repair times. TI Lap lace transformations technique is used to calculate the point availability, the average availability and the steady state availability. The optimal number of preventive maintenance that maximize the expected profit values are evaluated and used to increase the availability of the there state system. A Complete view for the multi state system considering the four state system are here introduced, assuming the exponential distribution for failure times and repair times. The steady state availability is evaluated, different warranty and preventive maintenance policies are introduced and the cost of these policies for the manufacturer and for the buyer in the multi state system case is evaluated.

Name **: Ahmed Mohamed Emam Zaky**

Faculty **: Institute of Statistical Studies and Research**

Dept. **:** Science in Operations Research

Degree **:** M.Sc.

Title of Thesis: A Particle Swarm Technique for Treating Optimization Problems

Supervisors : Dr. Mohamed Hassan Gadallah and Dr. Mohamed Bayoumi Ali

Abstract :

Swarm intelligence (SI) is considered one of the most popular computational intelligence paradigms. It originated from the study of colonies, or swarms of social organisms. Studies of the social behavior of organisms (individuals) in swarms prompted the design of very efficient optimization and clustering algorithms used to solve difficult optimization problems by simulating natural evolution over populations of candidate solutions. One of these algorithms is the particle swarm optimization algorithm that we will focus in this thesis.

Particle swarm optimization (PSO) is a stochastic optimization approach, modeled on the social behavior of bird flocks. In PSO, individuals, referred to as particles, are "flown" through hyper dimensional search space. Changes to the position of particles within the search space are based on the social-psychological tendency of individuals to emulate the success of other individuals. The changes to a particle within the swarm are therefore influenced by the experience, or knowledge, of its neighbors. The search behavior of a particle is affected by that of other particles within the swarm, where each particle represents a candidate solution to the problem at hand.

The PSO particle positions oscillate in damped sinusoidal waves until they converge to points in between their previous best positions and the global best positions discovered by all particles so far. If some point visited by a particle during this oscillation has better fitness than its previous best position, then the particle movement generally converges to the global best position discovered so far. Also the PSO algorithm does not guarantee convergence to a global best solution, or even a local solution, only to a best position found thus far.

This thesis introduces a new variation of the PSO algorithm called Triggered Particle Swarm Optimization (T- PSO). The new algorithm intended to combat two difficulties observed in many applications of PSO; the premature convergence of the solution, and the absence of confidence level in this solution.

The modified algorithm consists of three phases. First, the T- PSO technique executes the three main operations available in the original PSO algorithm

(initialization, evaluation, and modification). In the second phase, each particle reinitializes its record of its best position. This is achieved with periodic resetting, based on the iteration count. The main objective of the second phase is to avoid making direction and velocity decisions on the basis of outdated information. In second phase, the algorithm uses the new positions as a seed for searching the solution instead of the traditional initialization based on randomness process, and then executes the modification and evaluation operations. The stopping criterion here depends on two conditions: (a) the maximum number of iterations (b) a certain defined tolerance value. Finally, the solution based on confidence interval is supplemented. This modification allows PSO to search in both static and dynamic environments.

Humanity Educational Sector

- **Arts**
- **Archaeology**
- **Dar El-Ulum**
- **Kindergarten Education**
- **Specific Education**
- **Institute of Educational Studies**

***Name* : Naglaa Fathi Hafez**

***Faculty* : Arts**

***Dept.* :** Japanese Languages

***Degree* :** Ph.D.

Title of Thesis: The Infeluence of the "One Thousand and One Nights" on the Modern Japanese

Supervisors : Dr. Karam Khalil Salem and Dr. Ahmed Fathy Mostafa

Abstract :

Thesis represents focal point due to build confidence bridges between Arabs Theaters and literature and Japanese.

Keywords:

The modern japanese drama; The image of the middle east on the modern japanese drama; The islamic - arabic culture.

Name **:** **Dalia Mohamed Mohamed Saleh**

Faculty **:** **Arts**

Dept. **:** Geography

Degree **:** Ph.D.

Title of Thesis: New Settlements Around Greater Cairo Region Urban Planning Study using GIS

Supervisors : Dr. Ahmed Hassan Ibrahim, Dr. Fred M. Shelly and Dr. Charles G. Warnken

Abstract :

The study discusses what the new urban Settlements around Greater Cairo look like, and sheds light on the program of planning that was designed for Greater Cairo in an attempt to alleviate the problem of overpopulation there. In the endeavor, ten new urban settlements were planned, the positions of which are outside the ring-road that circulates the Cairo region. This strategy comes as an attempt to benefit from the experiences of new cities in many countries of the world.

The study then highlights the gap between the planning and the execution of these ten settlements, as there original designs were changed as follows:

•Annexation of some of them to be a new city, as happened to Settlements number 1, 3 and 5, which were conjoined to establish the city of Al-Qahira Al-Jadida (or New Cairo city).

•Turning others into a new city and make some addition of new tracts of land around the former residential areas, as happened to "El-Sheikh Zayed" city, which was basically the settlement no. 6, and for the settlement no. 2, which turned into the "EI-Shorouq" city.

•Other settlements were added to other already existing new cities, such as settlement no. 7, which was added to the 6th of October City.

•The others have been fully overlooked and never came into existence, such as settlements number (4, 8, 9, and 10).

At the end, the study reviews the impact of the shift in strategic planning on the Greater Cairo Region, through shedding light on the region during the period of work on the preparing the plans for the settlements at the first shape, and after the change in plans and its reality now, then the study discusses the trends of urban growth in the region, in order to predict the future through using GIS and remote sensing techniques.

Name **: Mahmoud Abd El-F. M. Abd El-L. Anbar**

Faculty **: Arts**

Dept. **:** Geography

Degree **:** M.Sc.

Title of Thesis: The Climate of Eastern Nile Delta and its Environmental Impacts, using Geographical Information Systems and Remote Sensing

Supervisors : Dr. Youssef Abd El-Maguid Fayed, Dr. Mohamed Sabry Mahsoub and Dr. Hamdy Ebrahim El-Gamily

Abstract :

The study consists of six chapters, preceded by a general introduction and followed by a conclusion. The general introduction included determining the study area, the rationale behind selecting the topic, objectives of study, questions of study, sources of study, methods and techniques of study, the study contents, and difficulties of study.

The first chapter studied the forcing factors in determining the characteristics of the climate of eastern Nile delta. **The second chapter** dealt with an analytical study of the solar radiation and air temperature. **The third chapter** concentrated on the annual, seasonal, and monthly distributions of atmospheric pressure. It further studied the forcing factors on the movement surface wind and its speed. **The fourth chapter** contained the quantitative study for elements: "relative humidity, evaporation and some of condensation features". **The fifth chapter** tackled the climatic and environmental problems, which threatened the ecosystem in the eastern Nile delta, by using geographical information systems and remote sensing. **The sixth chapter** is entitled "The Climate Influence on The Human Comfort and Human Health in the Eastern Nile Delta". The researcher determined the role of the climatic conditions on the psychological and physiological human comfort.

The conclusion summarized the most important scientific results obtained from the study. Besides, it introduced some recommendations and suggestions, which may be useful in the sustainable development of the eastern Nile delta.

Keywords:

The Nile delta; Climate; Environment; Climatic problems; Environmental problems; Sustainable development; Human comfort; Human health; Sand encroachment (Movement, Creep); Roads accidents; Desertification; Air pollution (Smog); Geographical information systems (GIS); Remote sensing (RS).

***Name* : Marwa Ibiahim Eid Mohamed**

***Faculty* : Arts**

***Dept.* :** Oriental Language

***Degree* :** M.Sc.

Title of Thesis: The Ethiopian Text during the Reign (Period) of Lalibala King Between Religion Effect and Historical Facts (1150-1220 AC) A Translation and Analytical Study

Supervisors : Dr. Omer Saber Abd El-Glil and Dr. Manal Abd El-Fatah

Abstract :

Thesis aim is the translation Ethiopic text to Arabic Language for its religious and historical importance, and to supply the Arabic Library with the original source of the most important period in history of Ethiopia. And to make spot on this dark period in the history of Ethiopia. The Thesis contains: Preface, and four parts every part is divided into two or three chapters, then the conclusion, references, appendixes, list of Ethiopian months, maps, pictures for churches of Lalibala. , and the Ethiopic Text. The First part speaks about the Zagwe Dynasty and King Lalibala. The Second part speaks about the relation of Ethiopia with The Muslims during period of Zagwe dynasty, and the Ethiopian Egyptian Relations. The Third part speaks about the translation of the Ethiopic Text into Arabic language, and also deals with the differences between published text and unpublished text, also the differences between the Arabic translation and French translation. Finally, the fourth part contains the linguistic study of the Ethiopic Text.

Keywords:

Ethiopia; Lalibala; Zagwe dynasty; The Saint teklahaymanot; The Saint iyasu Mo'a; Gabra masqal; Churches of lalibala; Masqal kebra.

Name : **Ahmed Ebrahem Ali Ahmed Badran**

Faculty : **Atchaeology**

Dept. : Egyptology

Degree : Ph.D.

Title of Thesis: Hieroglyphic Texts Inscribed on the Private Statues of the Non – Royal Elite in the Late Period (755 – 332 B.C). A Linguistic - Cultural Study

Supervisors : Dr. Mohamed Abd El-Haliem Nour El-Din

Abstract :

The Thesis deals with a very important topic entitled "The Hieroglyphic texts inscribed on the private statues of the Non – Royal Elite in the late period (755 – 332 B.C).

According to the thesis, the texts are divided to four main categories:

-Autobiography texts.

-Offering texts.

-Titles and jobs texts.

-Genealogy texts.

Keywords:

Hieroglyphic texts; Non-Royal elite; Late period; Autobiography; Offering lists; Genealog; Titles; Cachette; Chronology.

Name : **Seham Abdallah Gad Abdallah**

Faculty : **Atchaeology**

Dept. : Islamic Atchaeology

Degree : Ph.D.

Title of Thesis: The Stele Inscriptions in Tripoli During The First Ottoman Era and Qaramanli (958-1251 A.H /1551-1835 A.D) "Artistic and Archaeological Study"

Supervisors : Dr. Mohamed Hamza Alhaddad and Dr. Salah Ahmed Albahnacy

Abstract :

The Study has Concentrated on the Stele Inscriptions in Tripoli during The First Ottoman Era and Qaramanli, The Study Consists of Two Volumes, The First: Includes The Text of the Study in 413 Pages, While the Second includes the Figures, drawings, tables **(Catalogue)** of the study in 98 figure, 54 table, 151 drawing, The Text is divided into: Introduction, Preface, three parts, like the following:

-Introduction: the importance of including the subject and the reasons for his choice and the difficulty of the search and the most important sources and references and previous studies and research methodology.

- Part One: A descriptive Study of the evidence of the group and includes three chapters.

Chapter I: A Study of Inscriptions witness in the centuries (10-11 e / 16 -17 m), followed **by Chapter 11:** Epigraphy witness in the centuries (12¬ 13 e / 18 -19 m), and **Chapter III :** Include A study the holding of discussions between the stele inscriptions and the object of study than that on buildings and contemporary art and study the same methodology of evidence to determine the extent of similarities and differences and reach for a new one in the field of ancient inscriptions.

-Part Two : presents the analytical study, which includes three Chapters: Chapter I: deals with the study formulas and content, including: religious texts and prayers and titles and then the date and the expense of the strings.

-Part III : A Study of decorative elements, whether plant or engineering evidence of the group, where the artist excelled in the decoration of all decorative styles, whether local or from abroad, whether in Turkey or Tunisia, to make up between floral decoration is inspired by natural and other modified organisms, or a variety of engineering that they represent the prevailing forms or innovative, where the surface of the witness or the interview panel cover fees related to as Aloi or embroidery.

then A study of Graphology and types, as it represents a prominent role of literature and basic decoration and the history of many of the evidence. **Concludes** the letter of the most important results of the study, then the second volume includes the shapes and plates and tables, and sources and references.

Name : **Fatmaa El Zahraa Sadat Mohamed**

Faculty : **Atchaeology**

Dept. : Conservation

Degree : M.Sc.

Title of Thesis: Applications of Laser and Ultrasonic Techniques in the Cleaning of Metal Threads, Applied on a Selected Object

Supervisors : Dr. Wafaa Anwar Mohamed, Dr. Mai Mohamed Rifaai and Dr. Mahmuod Sayed Morsi

Abstract :

This present work deals with testing and application of innovated non-destructive cleaning techniques for the cleaning of a delicate category of historical composite artefacts. As gilded metal threads which involved for embroidery purpose appeared to be of significant value and importance; and highly correlated to the richly-noble classes through the history, due to the nobility and beauty of gold. As this category of embroidery has long been a mark of wealth and status in many cultures including ancient Persia, China, India etc.

An Indian Mogul fabric dates back to the 17th -18th century A.D. was selected as a case study in this research. This fabric showed different aspects of degradation and corrosion.

Recent advanced examination and analytical techniques were undertaken to identify organic and inorganic composition of the fabric. Light Microscopes (LM), Polarizing Microscopes (PM) and Scanning Electron Microscopes (SEM) accompanied by micro-analysis using (EDX), Fourier-Transform Infra- Red Spectroscopy (FTIR) and Atomic Absorption Spectroscopy (AAS).

Unfortunately, most conventional cleaning techniques do not assure the efficient cleaning of metal corrosion being detected, or keeping the integrity of other organic parts. Accordingly, most of these methods proved to be ineffectual in most cases; and make it worth not to clean metal threads at all an approving concern. Searching for other non-destructive alternatives to clean such tarnished metal threads was and still a big challenge for many researchers and a main concern for metal and textile conservators.

Therefore both laser and ultrasonic probe were the proposed techniques in this study to be tested. Dry application for both was the only preferred procedure. This target cannot be practically achieved without performing simulation study" experimental" on test samples identical to the real metal threads to evaluate cleaning efficiency. Loss metal thread fragments which were found spread around

in the storage drawer were involved to be used as test samples.

Based upon simulation study results, the technique which approved to be more appropriate was then applied for the cleaning of the case study. Results obtained showed the suitability of both techniques to be involved. Although, some differences have been noticed. Ultrasonic dental scaler/probe was successfully employed; within definite parameters such as potential and time. On the other hand, the other pilot tests showed the possibility of using Q-switched Nd: YAG laser at 2nd harmonic 532nm to be successfully applied for partial cleaning of metal tarnishing; without causing neither visual nor microscopic alterations of the core fibre. The application of the approved cleaning techniques came at the end to be applied on the studied object "embroidered fabric" to clean most of tarnishing layers on metal threads which resulted in distortion and dullness. Cleaning helped to uncover the aesthetic appearance of the studied object. Then, the preservative maintenance came lastly in the form of consolidation and temporary storage.

Keywords:

Metal embroidery; Metal threads; C.D.R(cast, drawn, and rolled); Galvanic corrosion; Pitting corrosion; Dry cleaning; Ultrasonic descaer; Ultrasonic probe/descaler; Cleaning; Nd:YAG laser; Q-Switching.

***Name* : Khaled Mohamed Saber Mustafa**

***Faculty* : Dar El-Ulum**

***Dept.* :** Linguistics, Semitic & Oriental Studies.

***Degree* :** Ph.D.

Title of Thesis: The Phonological Characteristics of Modern Standard Arabic: A Computational Analysis of News Broadcasts on Egyptian Satellite Channels

Supervisors : Dr. Mohamed Hasan Abdelaziz and Dr. Mohsen Rashwan

Abstract :

This study investigates the phonological characteristics of MSA as spoken in the news broadcasts on Egyptian satellite channels. The study carries out a number of statistical analyses and makes use of some software programs in recording and analyzing the data, with the aim of uncovering the acoustic and physiological features of the sounds under examination.

Keywords :

The Phonological Characteristics; Modern Standard Arabic A Computational Analysis; Statistical analyses; Voicing.

Name **:** **Moawad Azouz Ahmed Azouz**

Faculty **:** **Dar El-Ulum**

Dept. **:** Islamic History and Culture

Degree **:** M.Sc.

Title of Thesis: The Historical Aspects in Ibnull Qaim Al Jawziaiah Books (691H-751H) (1292-1350AD)

Supervisors : Dr. Abdel-Fattah Fathi Abdel-Fattah

Abstract :

This historical and civilize types in Ibnull Qaim Al Jawziaiah studies. The historical type shows The Creativation in (sera or prophet) and his Sharing in translating Field and how he asserts.

The Islamic sects history in The civilization Field we show his vision in political Field in Islam, and Its Sharing in economical Thought and his social Theory. Which leads to remedy of Islamic society.

And his creative in morals and education Field. This studies after him showed results That assert in Ibnull Qaim is front of The great historicals. Who take The scientific Field in historical civilized writing.

Keywords:

This historical and civilize types; Sera or prophet; Ibnull Qaim Al Jawziaiah; Translating; Political field in islam-economical thought; Social theory; Morals and education.

***Name* : Hanan Abd Alnaby Alsaied Ahmed**

***Faculty* : Kindergarten Education**

***Dept.* :** Education Science

***Degree* :** Ph.D.

Title of Thesis: The Effectiveness of the Program for Concrete Expression in Enriching Aesthetic Education for the Kindergarten Child

Supervisors : Dr. Ebtehag Mahmoud Tolba and Dr. Rokia Abdo El-Shenawy

Abstract :

The Present study aims at getting acquainted with the effectiveness of the Concrete Expression Program for Enriching Aesthetic Education for the Kindergarten Child.

The study had used the experimental methodology with one group, and the study sample comprised (30) child from second level children whose ages ranged between (5: 6) years in Al Emam Mohamed Abdo kindergarten school in Mahalla from al gharbya , the study student employed The Aesthetic behavior observation card through concrete expression of kindergarten child, The Aesthetic behavior observation card of kindergarten child inside an exhibition

of concrete expression, The Aesthetic of concrete expression of kindergarten child, The Aesthetic sensational measurement of kindergarten child, and the suggested program which was applied on the study sample subjects over (81) hours at (6) days in week.

The results demonstrated that using the Concrete Expression Program had a positive impact on developing aesthetic behavior, and aesthetic sense of kindergarten child to Enriching Aesthetic Education for him.

Keywords:

Program concrete expression; Aesthetic education; Kindergarten child.

***Name* :** **Asmaa Essa Mohammed Kholy**

***Faculty* :** **Kindergarten Education**

***Dept.* :** Basic Sciences

***Degree* :** M.Sc.

Title of Thesis: Effectiveness of a Program for Development of the Kindergarten Teacher Awareness of some Environmental Crafts and Art Skills Necessary to be Employed at Kindergarten

Supervisors : Dr. Kamal Al Dean Hussain and Dr. Ahmed Ameen

Abstract :

Art skills is something favorite to kindergarten children, therefore teachers should pay more attention to these skills. The sample of the study consists of 20 female students at the fourth grade of faculty of kindergarten, Fayoum University, the study used the sample as one experimental group. There are statistically significant differences between score means of experimental groups teachers on the pre-application and the post-application of "the questionnaire of the cognitive aspect of some environmental crafts in kindergarten teachers", as a whole, in favor of the pos-application, which indicates the effectiveness of the Program of Environmental Crafts in developing kindergarten teacher awareness of some environmental crafts (handmade carpets, manual embroidery, and palm products craft).

Keywords:

Environmental crafts; Art skill; Kindergarten.

***Name* :** **Ghada Eissa Anwar Eissa**

***Faculty* :** **Specific Education**

***Dept.* :** Educational Information

***Degree* :** Ph.D.

Title of Thesis: Effectiveness of a Program in Handicrafts to Decrease the Effect of Stress in a Sample of Juvenile Delinquents

Supervisors : Dr. Ali Mohamed El-Meligy and Dr. Fatma Abd El-Aziz El-Mahmoudy

Abstract :

The study contains the concept of the category of juvenile delinquents, the subjective opinion of Islamic law (Sharia) in treatment of juvenile delinquents, the subjective of Islamic law (Sharia) in treatment of juvenile delinquents the concept of stress and factors of juvenile delinquency' stress, and display the difficulties and general problems within all institutions and offer .some proposals for the development of work at the organizations of the Juvenile Welfare and It offers the concept of Handicrafts upon normal and abnormal, in addition to the contemporary conception of Handicrafts, the concept of experimentation and synthesis in addition to display the history and the origins of art medication and presentation of its objectives, philosophy, tools, and how to diagnosis in the process of art medication. and It contains display of the content of proposed program in Handicrafts in addition to the arbitration of the results of the program through a group of specialists in the field, then analyzing those results statistically to indicate the extent of correctness of hypotheses and finally.

Keywords:

Program; Handicrafts; Stress; Juvenile delinquents.

Name : **Reham Ahmed Mohammed Zaki**

Faculty : **Specific Education**

Dept. : Educational Information

Degree : M.Sc.

Title of Thesis: Egyptian Universities Youth Attitudes Toward Characters Presented in T.V. Ads and its Relation to their Realization of the Social Reality

Supervisors : Dr. El-Sayed Bahnasy and Dr. Hanan Youssef

Abstract :

The study includes character study submitted declarations TV, where this is the hub of hubs, which are modern in the field of media studies in general and advertising in particular at the local and international, most of the Arab studies dealt with the child's personality or a woman and she said the foreign studies of older persons; while the study focused the current analysis character both of the "child, youth, women, men, older people," and study the relationship between trends in university youth of Egypt about the characters and their understanding of the social reality based on the survey method analytical 581 advertising on Rotana Cinema, Egyptian Satellite Channel, DreamWorks 2, mbc1 and field survey 420 Single of university students through the theory has frequently been used in the field ~f drama had not been used in advertising, a theory of planting culture, where the researcher created five standards of design, a, the scale of density View the TV commercials, the scale seen active for TV ads, the scale of perception and realistic content submitted declarations TV , the scale of attitudes towards the characters submitted declarations television, the scale of the economic level the social platform for use in the production of TV commercials, as applied to the study on a representative sample be generalized to meet the needs of the public providers, TV commercials, and has to provide the agency Tarek Nour Advertising study of the application.

Keywords:

Attitudes; Youth; Characters presented in T.V. Ads; The Social reality.

***Name* :** **Aysam Saad Mohamady Mahmoud**
***Faculty* :** **Institute of Educational Studies**
***Dept.* :** Foundations of Education
***Degree* :** Ph.D.

Title of Thesis: The Educational Role of Higher Education Hellenistic Institutions in Egypt (290 B.C - 391 A.C)

Supervisors : Dr. Nadia Gamal El-Din and Dr. Sami Mohamed Nassar

Abstract :

The history of Egypt is classified into the following eras: Pharaonic, Greek, Roman, Byzantine, Islami, Ottoman, and modern eras. The most important era in the history of Egypt was the Ptolemaic era when the Ptolemaists governed it. Although Egypt became a Roman mandate after the Ptolemaic and the Byzantine eras, the effect of the Greek civilization and its culture continued during this era. Preserving their cultural heritage was a main aim the Greeks tried to realize when they came to Egypt. They were proud of the Hellenistic culture and interested in founding an educational system that preserved their Hellenistic heritage and their cultural identity in Egypt.

The Greek educational stages in Egypt were three: the primary, the general culture and the higher education stages. The higher education stage was one of the most important stages which played an effective role in the civilization of Egypt through its authentication of sciences and its production of arts by its scientists who came from every country to settle on the land of Egypt during the Roman Greek era. Alexandria was the center of the Greek civilization and education, and the Hellenistic world also during this period. It produced a mixed civilization for us; the Greek civilization mixed with the elements of the Oriental civilization and then it was named the Hellenistic civilization. Under this civilization, the Hellenistic higher education institutions were -founded in many parts in Egypt, particularly in Alexandria.

Although the higher education institutions spread in the Hellenistic world in some cities such as Marsalia, Athens and Tarsus, the city of Alexandria was a distinctive place of the higher education with its institutions including Museion, the greater library and Serapeum Temple. The historians termed all these institutions "the Ancient Alexandria University". The present study tried to examine the educational role of these institutions between 290 B.C and 391 A.C.

Keywords:

Higher education; Egypt; Hellenistic; Greco; Roman egypt; Ptolemaic egypt; Ancient alexandria; The Alexandrian library; The Museum, academic of alexandria; School of alexandria; Mousieon.

***Name* : Rania Ibrahem Ahmed El Sayed**

***Faculty* : Institute of Educational Studies**

***Dept.* :** Instructional Technology

***Degree* :** M.Sc.

Title of Thesis: The Relationship Between the Styles of Content Organization in Educational Hypermedia Programs and the Learning Efficiency

Supervisors : Dr. Mohamed Abd Elhamed Ahmed and Dr. Amal Abdel-Fattah Swedan

Abstract :

This Research concerned to study the relationship between patterns of organizing content in the educational hypermedia programs and the efficiency of learning throughout using the Hierarchical Hyper Concept Map (HHCM) by using in the organizing the content of the suggested educational unit in the current research in two different organizing ways shown in the material of the experimental treatments, the first will depend on the HHCM in an Empirical way (from total to parts – Up-Down), the other will depend on the HHCM in Inductive way (From parts to total – Down-Up).

Research Results validity that There is a significant statistical difference on 0.05 level between average scores, Learning Times, Learning Efficiency of the students of experimental groups who study through an educational hypermedia program related to the main effect of the Organizing content style using (the Hierarchical Hyper Concept Map in an Deductive way.

Keywords:

Hypermedia; Content organization; Hierarchical hyper concept map (or HHCM); Learning efficiency.

Social Sciences Sector

- **Law**
- **Commerce**
- **Mass Communication**
- **Economics and Political Sciences**

***Name* :** **Hesham Hamza Abd El-Hamid Said**

***Faculty* :** **Law**

***Dept.* :** Public International Law

***Degree* :** Ph.D.

Title of Thesis: The Common Utilization of International Rivers Waters in the Light of the Principles of International Water Law with a Special Study of the Legal System for the Common Utilization of Water Resources of the Nile River Basin

Supervisors : Dr. Ahmed Abou Al-Wafa Hassan

Abstract :

This study is based on an introductory chapter which is a historical study about some rules of the common utilization of international rivers in the ancient laws. The first section points out the utilization of shared water resources in the light of the most important concepts of international rivers (drainage basin & international watercourse). It discloses the efforts of jurisprudence that has been made to identify the principles of international water law (the principle of equitable utilization, and the principle of not to cause harm, and the principle of cooperation between riparian States). The study also deals with the international practice of the international water law principles, e.g., texts of international agreements, and judgments of the international judiciary. It also discusses the relationship between those principles in the light of community of principles approach. Finally, it points out the existing legal regime within the Nile basin, with its assessment in the light of the community of principles approach. It also aims to evaluate the Draft of Cooperative Framework Agreement "Entebbe Draft 2007", in the light of the said approach.

Keywords:

Equitable utilization; No harm; Nile basin; International water law ; International rivers; Cooperation between riparian states.

***Name* : Amer Mohammed Qasem Omer**

***Faculty* : Law**

***Dept.* :** Civil Law

***Degree* :** Ph.D.

Title of Thesis: Agency Non-isolated A Comparative Study Between the Egyptian and Jordanian Law

Supervisors : Dr. Jaber Al-Mahjoub

Abstract :

This thesis is a comparative study that has handled the subject of the non-isolated Mandate in both the Egyptian law and the Jordanian law. Two major reasons have urged the researcher to conduct this study. First: the fact that non-isolated Mandate contracts have become very common in the field of real estate sales, and car sales. Secondly, none of the previous studies has investigated this subject. Therefore, this study is conducted to clarify the ambiguity between the legislative text and the real practice in order to justify the clear difference between the effects of the regular Mandate and the effects of the non-isolated Mandate. As has been mentioned in the previous paragraph, the rationale of this research is the lack and the scarcity of previous studies on this topic.

Furthermore, by virtue of the importance of the subject, and the lack of detailed texts which show the provisions of the non-isolated Mandate especially in the Egyptian legislation, the researcher has decided to address the topic implementing the comparative analytical approach. The researcher has used the analytical method by shedding some light on the legal texts concerning the topic of the research, focusing on the terms and their compatibility with the goals of the legislator and the texts contained therein. The comparative approach used in this study has been based on the Egyptian civil law which has been compared with the Jordanian civil law as well as the related laws which are allocated by Jordanian legislator. It has also been compared with the French Civil law and other Arabian legislation, along with the Islamic jurisprudence position regarding this type of Mandates. These types of comparison are supposed to enrich the research as well as to inform the reader of the legal texts related to the Mandate in the above-mentioned laws. This study consists of an introductory chapter and two sections, in the introductory chapter, the researcher has introduced the concept of the Mandate contract and the freedom of isolation and/or the step down of the individual will. The first section, has introduced the concept of the non-isolated Mandate contract and its types, the second section has discussed the provisions of the non-isolated Mandate. The study has concluded that the legal nature of the non-isolated Mandate differs, in nature, from the legal nature of the non-isolated

Mandate of agreement. Both types of Mandates remain within the confines of the regular Mandate that can not be described in any other legal way such as a contract of sale or a contract of mortgage. This is so because the Egyptian and Jordanian legislators organize the provisions of this Mandate within the provisions of the regular Mandate. At the same time the researcher has recommended that the Egyptian and Jordanian legislators reduce the Real Estate registration fees and the car sales documentation fees in order to reduce the phenomenon of hiding sale in the form of non-isolated Mandate and in order not to undermine the goal for which this type of Mandates (non-isolated Mandate) has been found.

Keywords:

Tags: agency; Prosecutor; Public agency; Private agency; The Agency of non-isolated.

***Name* :** **Mohamed El-Demrdash Zaki Morsi**

***Faculty* :** **Law**

***Dept.* :** Islamic Law

***Degree* :** Ph.D.

Title of Thesis: The Imamt Theory in El-Emamiah El-Ethna Aahriah Jurisprudence

Supervisors : Dr. Anwar Dabour

Abstract :

The theory of the Imamate has a threatical importance from the perspective of El Shia El Ethna Ashria. This threatical importance is characterized in what they have written and in what they are writing of publications which include rich intellectual and scientific heritage. The Imamate theory also has practical values and significances which have been evidentially proved after laying down the foundations of Iran, the first country in the present time, which is built upon this theory. Since then the Imamate theory and the jurist's assuming of power became an explicit reality that is worthy of being considered and evaluated. El Shia El Zaidiah adopted the Imamate theory for interrupted periods of time, nevertheless, this adoption did not resemble the intellectual richness of El Ethna Ashria. The researcher chooses to deal with the perspective of El Ethna Ashria of the Imamate theory in parallel with the perspective of El Shia El Zaidiah. His main objective was always the eager search for what brings the Moslems together not what separates them and keeps them apart. He aims at getting acquainted with the views of each party from their own resources not from the resources of their opponents or critics.

Keywords:

Sheaa; Emamia; Zaidiah; Emama.

***Name* :** **Ahmed Abdulah Mohamed Ali**

***Faculty* :** **Law**

***Dept.* :** Social Law

***Degree* :** M.Sc.

Title of Thesis: The Termination of Unlimited Employment Contract by Unilateral Will in the Egyptian Labor Law

Supervisors : Dr. Ahmed Hasan El-Boraie and Dr. Mohamed Ahmed Ismael

Abstract :

This study was to compare among three jurisdictions in respect of the Labor Law and the Egyptian Law. The comparing legislations are KSA, UAE and Kuwait Labor legislations. The theoretical and practical importance of studying the provisions of the termination of unlimited employment contract by the unilateral will residing in the fact that the compared legislations and jurisdictions of Gulf States -compared to Egyptian Labor Law - applies on many of foreigner workers and employees have been employed coming from abroad especially from Egypt.

This study is composed from preliminary chapter having an. overview for the provisions of unlimited employment contract termination adopted by the International and Arab Labor Standards in order to determine how the local compared jurisdictions and legislations have applied the rules of these standards, First Part having the focus on the definition and the nature of the contract termination by unilateral will , Second Party involved studying of the provisions of termination by unilateral will in general and the Third and Last Part has been illustrated the legitimate motivations of the cases in which the employer has the right of such termination to unlimited employment contact by its solely discretion. Furthermore, the conclusion has been including some deductions and recommendations in order to realize equilibrate position between the employer and the employee in the labor market of the compared jurisdictions.

Name **:** **Hoda M. N. Abd El-Hadi Shehata**

Faculty **:** **Law**

Dept. **:** Public Law

Degree **:** M.Sc.

Title of Thesis: The Power of an Administrative Authority to Liquidate Bank Letters of Guarantee for Public Work Contracts

Supervisors : Dr. Mahmoud M. Bdran

Abstract :

Public Works Contracts are one the most important type of such these contracts. The Administrative Authorities are using this type of contracts for purposes of the public utilities which serve the Public Interest. And as these works serve the Public Interest and financed by Public Funds, the contracts, which these works are its subject, are enclosed by guarantees which ensure that the work is perfectly in progress and allow choosing the suitable contractor which can execute the works at the specified time and by the lowest costs. According to the Tender and Auction law no.89/1998 the Administrative Authority usually requires the bidders to furnish a Bid Security in the specified amount to be certain of seriousness of the submitted bid and the contractor who enters into a contract with a State Agency prefers to furnish the Bid Security in the form of a Bank Letter of Guarantee rather than in cash.

Practically, Letters of Guarantee of Public Works Contracts pose many problems.

These problems are related to: Significance, nature, essence, elements and characteristics of a Public Works Contract. The competent authority delegated to enter into such contracts and the Contracting Parties to such contracts, represented in a State Agency (Administrative Authority) and a Contractor. And also the Scope of authority of a State Agency (Administrative Authority) in terms of: **requesting cashing a Letter of Guarantee as a result of withdrawing, entirely or partially, contracting works; **amendment of a contract and the effect of such amendments on the relevant Letter of Guarantee.

Finally, disputes arising from forfeiture of Letters of Guarantee in terms of: **nature of such disputes; **the judge competent to hearing such disputes; **scope of the judicial control entitled to this judge in this regard in terms of legitimacy and sufficiency؛

**permissibility of forfeiture or sequestration of a letter of guarantee; **possibility of settlement of such disputes by amicable ways or by arbitration; **effect of an Arbitration Agreement whether it (Arbitration Clause) has been included in a Principal Contract concluded between a State Agency and a contractor or in a Guarantee Agreement Principal Contract concluded between a State Agency and

a contractor or in a Guarantee Agreement concluded between a bank and a State Agency; **invoking an Arbitration Award against the source of a letter of guarantee (or the reference bank).

Keywords:

Tender and auction law no.89/1998; Administrative authority; Letter of guarantee.

Name : **Tahany Sami Mohamed**

Faculty : **Commerce**

Dept. : Accounting

Degree : Ph.D.

Title of Thesis: Evaluating the Role of Environmental Management Accounting Techniques to Improve the Measurement of the Financial Performance of the Finns

Supervisors : Dr. Helmy Abd El-Fattah El-Bishbeshy

Abstract :

In the light of a set of sub variables, was to propose a research model to verify the direct and indirect effect of the environmental management accounting techniques on the financial performance of firms, in the form of creating value for shareholders, as well as the study of the mutual influence between the environmental management accounting techniques and the environmental performance of these firms, in addition to verification of improvement in measuring the financial performance of the firms through the use o[appropriate measures of value.

The researcher relied on a quantitative study to a number of firms in some governorates in A.R.E: Cairo, Giza and the 6th of October and Helwan. A proposed model has been tested using structure equation model, where the results of statistical analysis showed the existence of a direct effect of the environmental management accounting techniques on the financial performance of firms, and the absence of mutual influence of the environmental management accounting techniques on the environmental performance of firms, also indicated the existence of an indirect effect of the environmental management accounting techniques on financial performance of the firms through the influence on the environmental performance of firms, as well as the influence of some sub-variables - such as property system, and the size of the firm, and the environmental exposure- on the environmental management accounting techniques and the environmental and financial performance of firms, and the "lack of effect of some other sub-variables, such as nature of the industry, legal form of the firm, and scope of the market of the firm's products, as well as the superiority measures of the value that depends on the accounting profit over the measures of value based on cash flows in measuring the improvement in the financial performance of these firms.

Based on the results of the current study, it has been shown to support the environmental management accounting techniques to improve the measures of the financial performance of firms.

Keywords:

Environmental management accounting techniques; Environmental performance; Financial performance; Environmental management system; Environmental efficiency; Social responsibility; Achieved value for shareholders, structural equations model.

Name : **Kholoud Abd El-Kareem Mohamed**

Faculty : **Commerce**

Dept. : Accounting

Degree : M.Sc.

Title of Thesis: The Integration between TQM and Innovation Performance to Enhance Organization Performance: An Accounting Approach

Supervisors : Dr. Saied Yehia Daw

Abstract :

The main objective of the work is to enhance the financial and nonfinancial performance through the integration between Total Quality Management (TQM) and technology management. The empirical data were drawn from a sample of 297 manufacturing organizations located in Giza govemorate. Questionnaire was used to collect data, and data was analyzed by using two statistical packages: SPSS and AMOS. Four main hypotheses are formulated in this work. The results indicate that: first, there is a strong positive relationship between TQM and organization performance, particularly nonfinancial performance. Second, there is a positive relationship between im10vation and organization performance, particularly nonfinancial performance. Third, there is a strong positive relationship between TQM and innovation. Finally, the integration between TQM and technology management enhance the organization performance especially nonfinancial performance.

Keywords:

Total quality management; Innovation; Balanced scorecard as evaluation tool; Path analysis.

***Name* :** **Soheir Osman Abdel Haleem Atia**

***Faculty* :** **Mass Communications**

***Dept.* :** Journalism

***Degree* :** Ph.D.

Title of Thesis: Factors Affecting the Readership of the Printed Journalism in Egypt: Field Study

Supervisors : Dr. Mahmoud Soliman Alamaldeen

Abstract :

This study is monitoring & explaining the point of view for readers & journalists about the factors affecting the readership of the printed press in Egypt, through an extensive field study has been made to the Egyptian readers on different features & characteristics, and on a sample of journalists working in different press organizations, through a survey that was applied in a certain period during the study.

The researcher used to study a num ber of patterns for the classification of the audience, like Reader Profile, Reader Selection, Reader - Non Reader, and Editor Reader Comparison.

The study concluded that the factors affecting the readership of the printed press in Egypt concerning motivated to read newspapers in general, the functions of newspapers from the perspective of readers, and trends of the readers towards journalists, current developments in the press market, the journalist and their effects, and competition from new media, which comes in the forefront of social networking sites and blogs and traditional forms of online journalism.

***Name* :** **Yasmin Ahmed Aly Hasan Fouad**

***Faculty* :** **Mass Communications**

***Dept.* :** Radio and Television

***Degree* :** M.Sc.

Title of Thesis: Family Relationships, as Provided by the Egyptian Soap Operas and their Impact on Family Interaction

Supervisors : Dr. Adly Sayed Reda

Abstract :

The research problem is represented in studying of the impact of the models presented for family relationships in the series of Egyptian social soap operas on a group of trends, believes, and behaviors related to the family interaction among members of the Egyptian family, in addition to studying the believes of both parents and children about the impact of watching those series, including offer models for family relationships, on their own family interaction, and on the family interaction of other family members .

On the theoretical framework and in supposing hypotheses, the study adopted the theories of cultural cultivation and the third person effect, as the study includes (11) hypotheses. In this study, the researcher applied both analytic and field survey approaches, as she analyzed the content of a sample of the TV soap operas of Egyptian social serials, which included (12) serials presented by both "Al Haya Moslsalat" and "Panorama Drama 1" channels. The analysis uses content analysis form, in addition to survey a random sample of 434 persons of audience of parents and children of members of Egyptian families residents of Cairo and Giza governorates through the application of questionnaire form prepared for each of the parents and children .

The results of the analytic study indicated that most Egyptian families televised in the soap opera sample of the study was interconnected in its relations by 62.8%. The relationships between nuclear family and extended great family, as extended in the drama series of study sample, were almost connected to by 96.30%. Also, the positive features of the relationship of both televised nuclear family and extended family represented 75.76% of the total characteristics that linked both televised nuclear family and extended family. The results of the field study showed that watching serials affected family interaction of the larger number of the study sample at an average level of a rate of 41.2% of the total study sample. The first hypothesis, which supposes that there is a statistically indictable correlation between the intensity of watching Egyptian social series by the members of the Egyptian family and the level of the impact of watching such

series on the interaction between them and their families, proved its correctness at the level of the total sample. The ninth hypothesis, and partially the tenth hypothesis have proven correctness as they suppose that the belief of each of parents and their offspring that family interaction of their family members is affected by watching Egyptian social soap operas in a way that creates increasing essential differences for believing that their family interaction is affected by watching such series.

Keywords:

Soap operas; Serials; Family relationships; Cultural cultivation theory; Third person effect theory; Family interaction; Egyptian family.

***Name* :** **Yasmin Ahmed Mostafa Sakr**

***Faculty* :** **Economics And Political Sciences**

***Dept.* :** Economics

***Degree* :** Ph.D.

Title of Thesis: The Suggested Policies for Pricing Irrigation Water in Egypt and its Possible Effects

Supervisors : Dr. Khadiga Mohamed El Assar

Abstract :

The Thesis is concerned with suggesting sinareos for irrigation water pricing in Egypt and studying its effects on the revenue of farmers and on the agricultural sector world competitiveness. Since the agricultural sector is the main consumer of water in Egypt and water is the main determinent of agricultural expansion needed to fill the Egyptian nutritional gap. It was important to think about irrigation water pricing in Egypt to inhance the best use of water in agriculture and to secure the fund needed to construct ,operate and maintain new irrigation projects.The thesis used linear programming to determine the best cropping pattern for the suggested sinareos. Also the policy analysis matrix was used to determine the effects of irrigation water pricing on the agricultural sector world competitiveness. The Thesis was concluded by some suggestions and applicable recommendatios in this field.

Keywords:

Agricultural economics; Irrigation water; Policy analysis matrix; Water resources; Linear programming; Irrigation water pricing.

Name **:** **Sally Farid Abdelghafar Abdelfatah**

Faculty **:** **Economics And Political Sciences**

Dept. **:** Statistics

Degree **:** M.Sc.

Title of Thesis: Contributions to Randomized Response Models

Supervisors : Dr. Reda Ibrahim Mazloum

Abstract :

Randomized Response (RR) Technique first introduced by Warner(1965) is a research method intended to measure the behavior, opinions or attitudes of the respondents towards sensitive topics (such as criminal behavior, drug abuse and customary marriage). The RR technique allows respondents to answer sensitive questions while maintaining their privacy through randomizing their responses according to some random mechanism. Variations of the.

RR technique were then developed in a trial to improve Warner's model In this study, four randomized response models are proposed in an attempt to obtain more efficient estimators of the population proportion possessing a sensitive attribute and at the same time, increase the respondents' cooperation. Two of the proposed models are based on the idea of using two decks of cards that was proposed by Odumade and Singh (2009) but with different structure for the statements used in the decks. The other two proposed models combine the idea of using two decks of cards together with the use of a two stage RR procedure. Empirical studies are undertaken to examine the efficiency of the proposed models. The proposed models can be easily adjusted to be more efficient than previously developed randomized response models. Moreover, comparisons between the proposed models are performed

Keywords:

Estimation of proportion; Randomized response technique; Two decks of cards; Two stage randomized response procedure.

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